

THE BRICKVILDER

VOLUME XXIII

NUMBER 11

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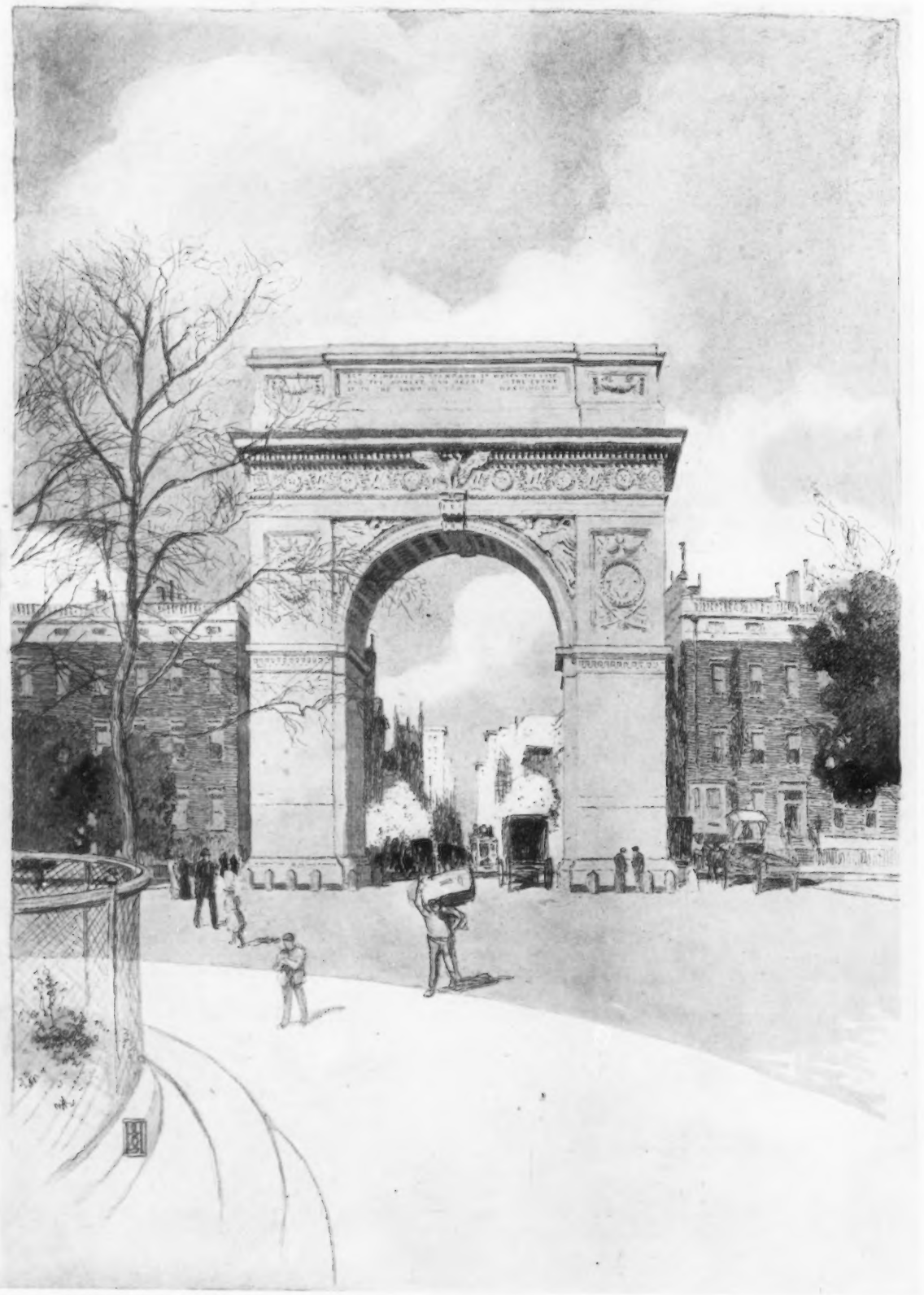
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PENCIL DRAWING OF WASHINGTON ARCH
WASHINGTON SQUARE, NEW YORK, N. Y.
McKIM, MEAD & WHITE, ARCHITECTS
BIRCH BURDETTE LONG, DELINEATOR

THE BRICKBUILDER

VOLUME XXIII

NOVEMBER, 1914

NUMBER 11

Recent Collegiate Architecture

AS EXEMPLIFIED IN THE WORK OF MESSRS. SHEPLEY, RUTAN & COOLIDGE AT HARVARD UNIVERSITY AND MESSRS. CRAM, GOODHUE & FERGUSON AT RICHMOND COLLEGE.

THE early American colleges had their start with modest endowments, which were conserved for the maintenance of professors and the building up of scholarly institutions rather than expended in the erection of fine buildings. The growth of these colleges proceeded slowly, but on a sound and rational basis, and as money was available and expansion necessitated, their buildings were increased in number. During this time, however, the art of architecture in America was in a transitional state, and the buildings erected from 1830 on, that now stand, are monuments to the perverted architectural ideals of the time.

The American universities have, as a result, no great architectural heritage with the exception of the older eastern ones, which had their first buildings conceived before the Revolution or in the early days of the Republic. In the following illustrations of the new Freshman Dormitories at Harvard and the new buildings for Richmond College there are evident two widely different types of architecture. The one is the result of working in the spirit of Colonial tradition—the only real American heritage we possess—and the other the widely accepted style of modified English Collegiate Gothic.

In recent years the leading American colleges have been fortunate to a greater degree than those of any other country in receiving large and frequent gifts of money. This has provided at once the services of the ablest staff of professors, the best possible equipment, and buildings which are well fitted to educational purposes. With ampler means and a widened conception of architecture by the college authorities, the opportunity was afforded the firms of Cope & Stewardson, Frank Miles Day & Brother, and Cram, Goodhue & Ferguson, among others, to inaugurate and develop an American style of collegiate architecture which, in the light of recent achievements, promises to rival that of the older English institutions in excellence.

Probably the first serious attempt at developing a collegiate style was made in the buildings of the University of Pennsylvania by Cope & Stewardson and, having little worthy tradition to guide them, the designers naturally turned to the great English universities for their inspiration. Their example was shortly followed in similar work at Princeton, Yale, and Washington universities, which established a very strong precedent, till now practically every college in America has adopted this style as being the most expressive for collegiate purposes, with the principal exceptions of Columbia, the Massachusetts Institute of Technology in their new buildings on the Charles River

in Cambridge, and Harvard University, who still adhere to the Classic.

Messrs. Cram, Goodhue & Ferguson of late years have had many and large commissions in this field. Their work at the U. S. Military Academy at West Point and the recently completed Graduate School at Princeton are examples of the masterful way in which they work, and in the new buildings at Richmond College they have once again proved the great beauty and utility of the style. Conditions in this case, however, were different from those that existed at West Point and Princeton in that financial means were not so ample, and that the prime consideration was to obtain as large and complete a group of buildings as possible with the funds available, the architecture being a matter of secondary importance. This difficult condition they have met with marked success—the buildings have been built with a strict regard for economy and have therefore been reduced to the simplest terms of the style, and in spite of these limiting conditions they fit the gently rolling character of the country side on which they are placed to an unusual degree.

The new site of Richmond College is a very remarkable one. It is a tract of almost unoccupied land about five miles west of Richmond, in the town of Westhampton. In the center is a narrow lake, about a quarter of a mile long. The land is generally wooded with pine, some hard wood, and a good deal of undergrowth. It slopes down to the lake on both sides, but is broken up laterally into hillocks and ravines, which are of the most irregular contours, especially on the east side, where most of the buildings have been placed. Any formal arrangement of buildings was utterly impossible, and in the final plan the architects followed in great measure the contours of the land, depending upon interesting grouping and vistas to give the group architectural character. Certain axes have been developed and emphasized, it is true, but the picturesque relation of the elements of the composition is far more important.

The main group, the Men's College, is on the east side of the lake, and the Women's College on the west, so far away from the other buildings as to have very little architectural connection with them. The center of the Men's College will be the great tower in the center of the Administration Building. About this are grouped the recitation halls and library. The professional schools make another group, the dormitories and chapel a third, the stadium, gymnasium, and refectory a fourth. The power house is on low land at the lower end of the lake, and the laboratories west of it, nearer the Women's College.



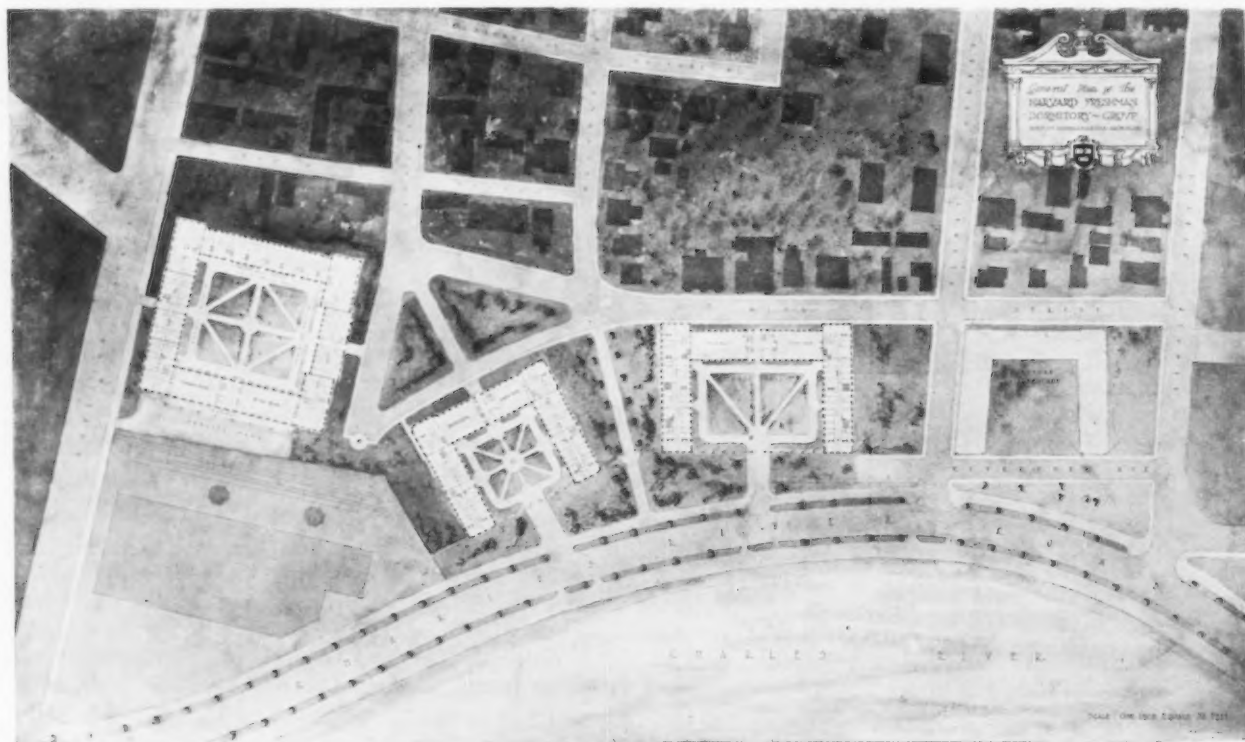
Standish Hall from Charles River Boulevard

The Women's College is the largest single building of the group; it is made up of a wing of lecture rooms and a residential quadrangle containing a dining room, common rooms, and dormitories. These latter are arranged on the corridor plan, but are divided into groups, each under the supervision of a resident teacher.

The buildings are fireproof throughout, built of brick with concrete stone trim. All the windows have metal casements with leaded glass. A considerable amount of glazed colored tile has been used on the exterior of the buildings with very effective results. The roofs are of variegated slate. The whole structure is an honest, straightforward piece of design and construction and an interesting addition to American collegiate architecture.

In considering the new dormitories at Harvard University in Cambridge, we encounter other conditions than those affecting the design of the preceding group. There were large funds at the disposal of the university; there was a decided rich font of architectural precedent to draw upon, and the buildings were to be located on a comparatively small area of ground in the center of a closely built-up section. The college authorities and the architects, Messrs. Shepley, Rutan & Coolidge, elected to perpetuate the Colonial traditions in the new group, and wisely so, for perhaps in all American universities there is nothing to equal the romance or inspiration to be derived from the fine old buildings that grace Harvard College yard.

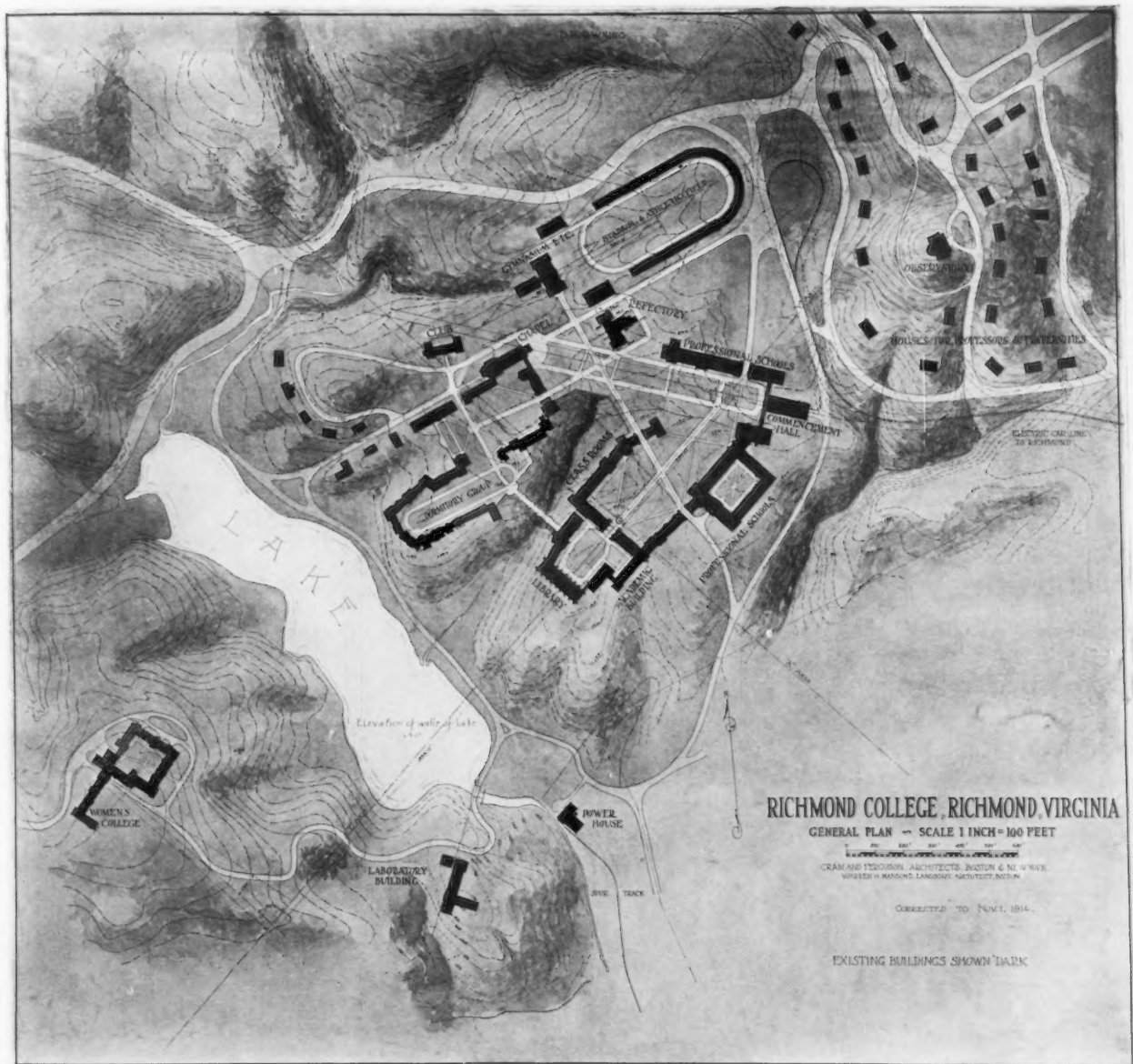
The old Harvard halls have obviously been taken as a



General Plan
Harvard University Freshman Dormitories, Cambridge, Mass.
Shepley, Rutan & Coolidge, Architects



General View of Women's College from the South



General Plan, Completed Buildings Shown Dark
 Richmond College, Richmond, Va.
 Cram, Goodhue & Ferguson, Architects (Boston Office)

model, but the newer buildings can in no sense be considered a copy of this existing work, but rather highly individual pieces of design which have been based on this excellent precedent. The whole scheme is a monument to the judicious expenditure of generous donations and to the untiring efforts of President Lowell, whose project of housing the freshmen together has thus been brought to completion in a very brief space of time.

The buildings are located on the river bank, only a short distance from the college yard and easily reached from there by way of Boylston, Dunster, or Holyoke streets. They are equally near the college boathouses and within easy reach of Soldiers' Field and the Stadium just across the river. The largest hall, accommodating about two hundred students, fronts on Boylston street, while the others, which are somewhat smaller, face the river. The three halls have a total accommodation of about four hundred and seventy-five students, and the scheme contemplates the construction of a fourth, facing the river, to provide for future growth.

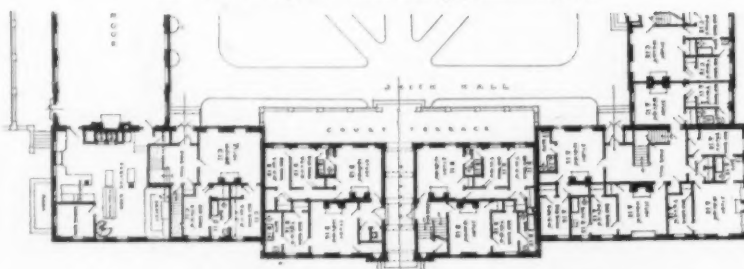
The Smith Halls, as they are called, after the donor and his parents—George, Persis, and James Smith—form the largest group. Persis Smith Hall fronts on Boylston street, and



Detail of Men's Dormitory, Richmond College
Cram, Goodhue & Ferguson, Architects
(Boston Office)



Typical Floor Plan
Men's Dormitory, Richmond College, Richmond, Va.



One-Half Plan of Smith Halls, showing First Floor Plan of James Smith Hall

directly across the court on the same axis is James Smith Hall, with George Smith Hall at the north side and the dining hall on the south side. These halls are the most domestic in style and possess some of the choicest Colonial detail of the entire group. The quadrangle is spacious and the long interior façades appear to advantage from any angle. The lower stories have heavy white shutters hung with wrought iron hinges and fastened back to the wall by the iron S-shaped turnbuckles typical of the period. The various entrance doors have been distinguished with different Colonial treatments and lighted by graceful iron lanterns, all of which help to create an atmosphere that at once is in complete harmony with time-honored traditions and a great inspiration for scholarly thought and conduct.

Standish and Gore Halls are alike in general composition, though differing in their architectural treatment. They are each composed of a central portion,

four stories in height, flanked by lower wings, the whole making three sides of a court, the fourth side of which is an enclosing fence with entrance gates in the center.

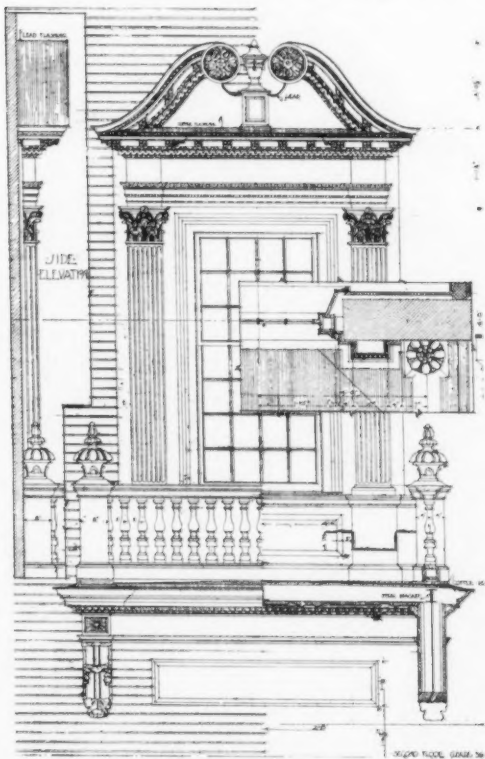
In Standish Hall the architects have followed the older Harvard buildings to a greater extent, probably, than in any of the others, such details as the moulded brick water table and belt courses being taken directly from Hollis Hall. Gore



Façade of James Smith Hall from Extension of Dunster Street
Harvard University Freshman Dormitories, Cambridge, Mass.
Shepley, Rutan & Coolidge, Architects

Hall, while similar in mass and proportion, shows on the other hand the influence of English work of practically the same date. Its architecture pleasantly suggests the best period of the English Renaissance or the quiet dignity of an old London town house. The detail of the central portion has a sober dignity that is very restful and inviting. The carved festoons, the bold use of the order, and the circular openings give the court façades an undeniable amount of style and charm.

Each of these buildings is divided into five sections, containing ten to sixteen suites with an entrance from the court and separate interior staircase, but they are connected on each floor by fire doors to furnish a secondary means of exit in case of emergency. The dining and common rooms in Standish and Gore Halls occupy the entire first floor of the central sections. The floors have been lowered below grade to give greater height to these large rooms without affecting the ex-



Detail of Central Window on Quadrangle Façade of James Smith Hall
Scale of Reproduction, 1 inch = 4 feet

Our readers will note that on this and other pages we reproduce the detail drawings of the Harvard University Freshman Dormitories in a special manner which will permit them to be scaled accurately, and insures to those interested the fullest means of studying these drawings of exceptional Colonial forms.



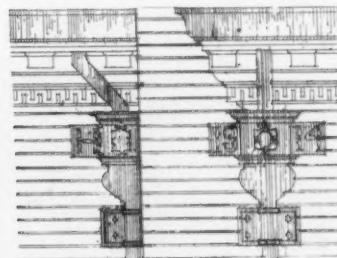
Detail of Wrought Iron Lantern
Scale, 1 inch = 2 feet



Entrance Door to Smith Halls Dining Hall



Central Portion of Court Side of Wings of Gore Hall



Detail of Typical Leader Head
Scale, 1 inch = 3 feet

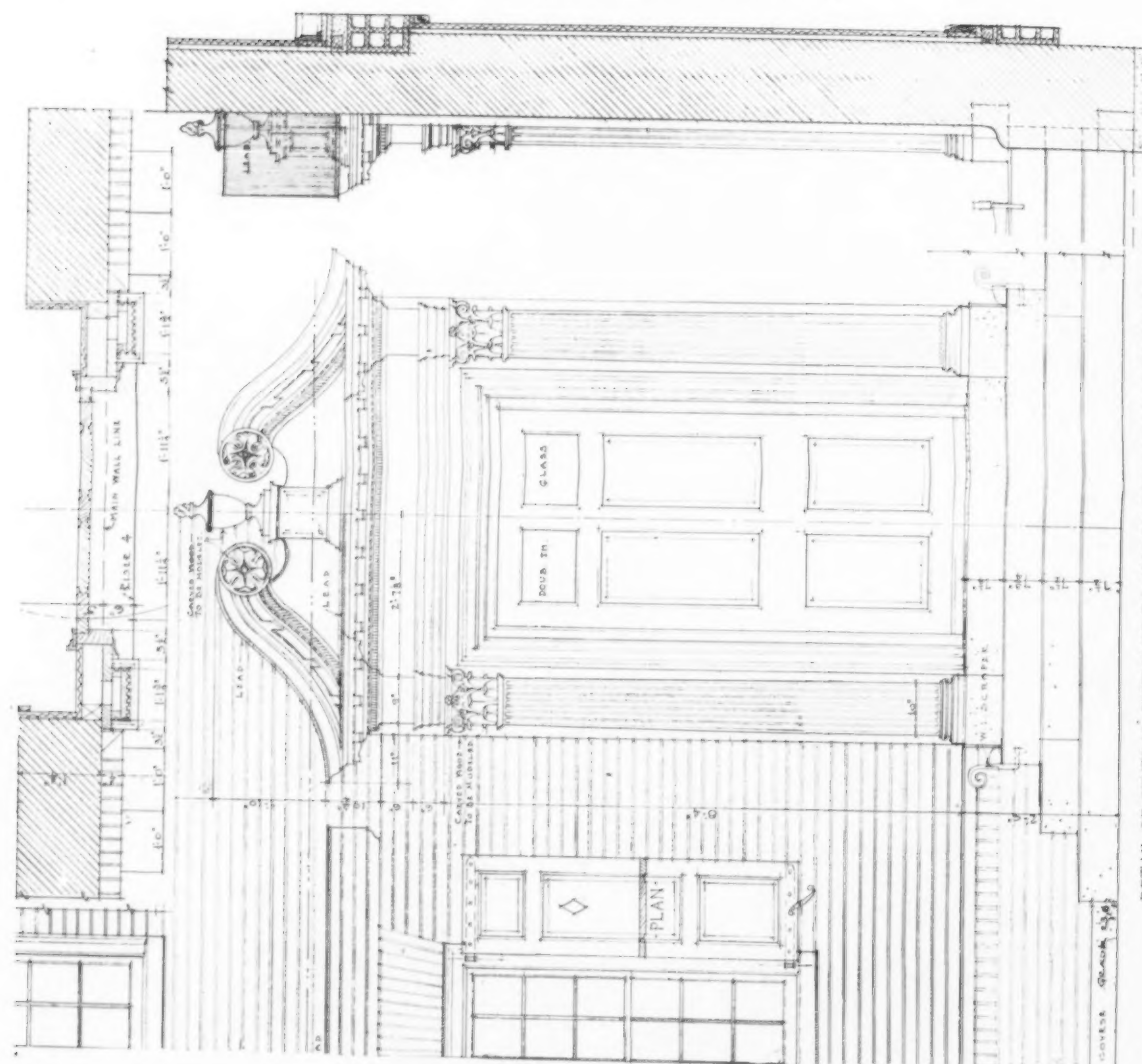


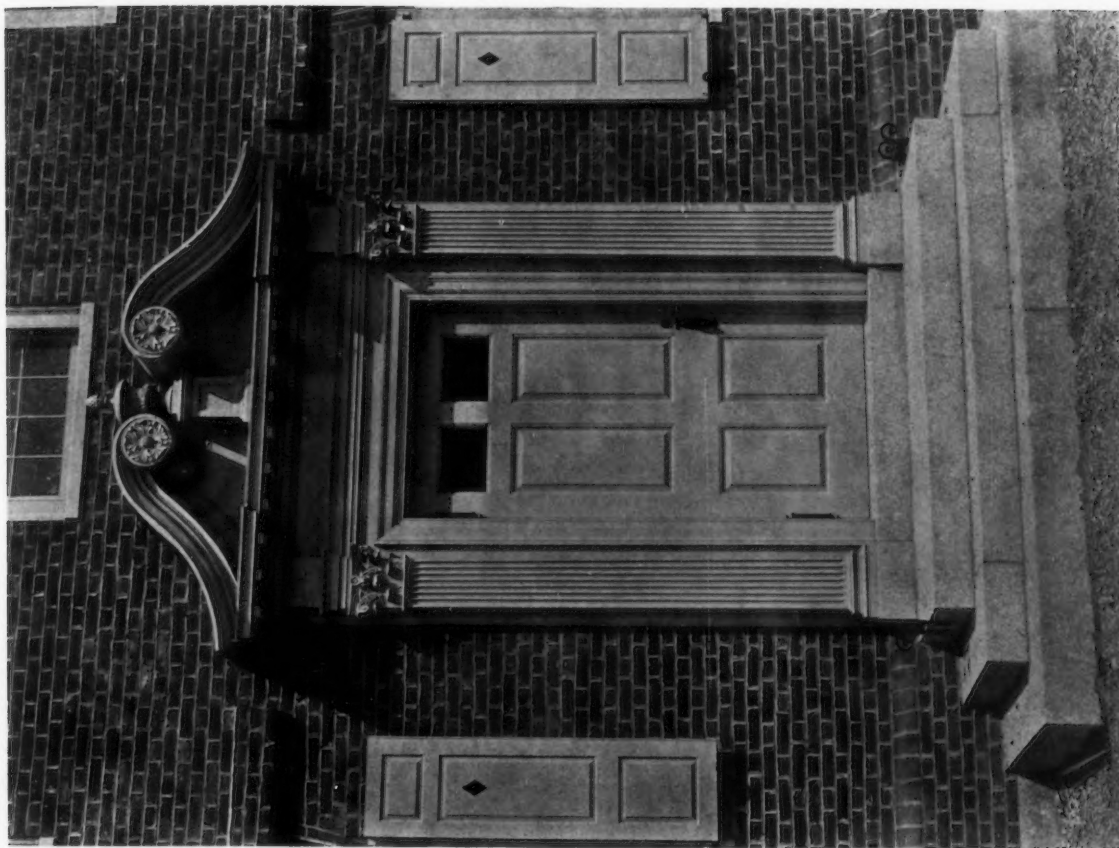
Entrance Door on Court Side of George Smith Hall

pression of story heights on the exterior.

In the basement of the dining hall wing of Smith Halls is the immense kitchen in which the food for all three dormitories is prepared. It is connected with serving rooms in the other dormitories by a long tunnel about 8 feet high and 6 feet wide, which contains the heating pipes from an adjacent power house.

The exterior walls are of rough, hard burned red brick with variegated slate roofs and stone and white painted wood details. They depend for their effectiveness upon the texture of the brickwork and the spacing and proportion of the openings, rather than upon any emphasis that has been given to architectural motives. The simple architectural details which have been used are, however, no less excellent than the proportion and fenestration. They follow the best Colonial precedent, and brought together in this consistent way they are as perfect an interpretation of Colonial forms as it has been our good fortune to see.



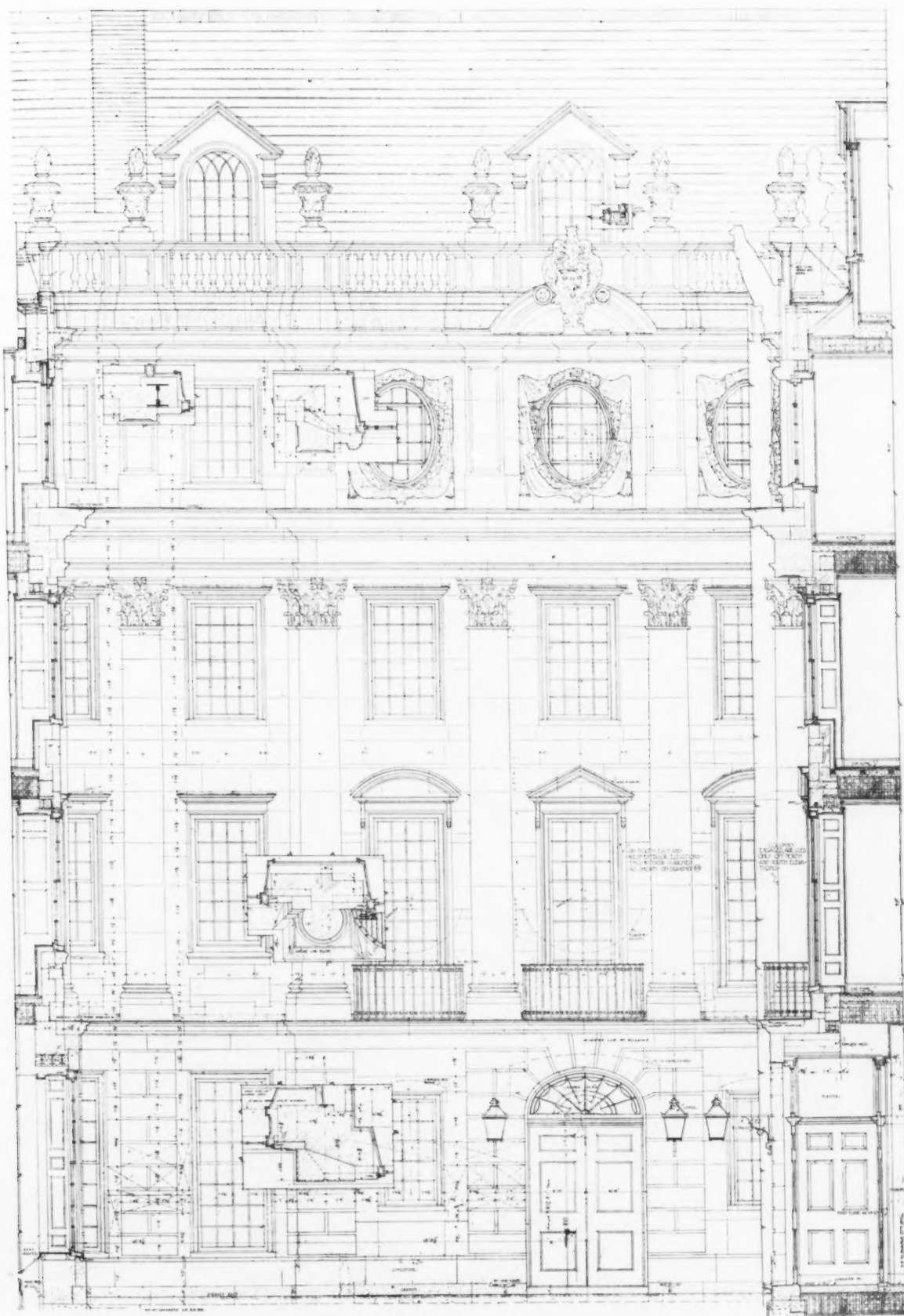


CENTRAL DOORWAY ON QUADRANGLE SIDE OF GEORGE SMITH HALL



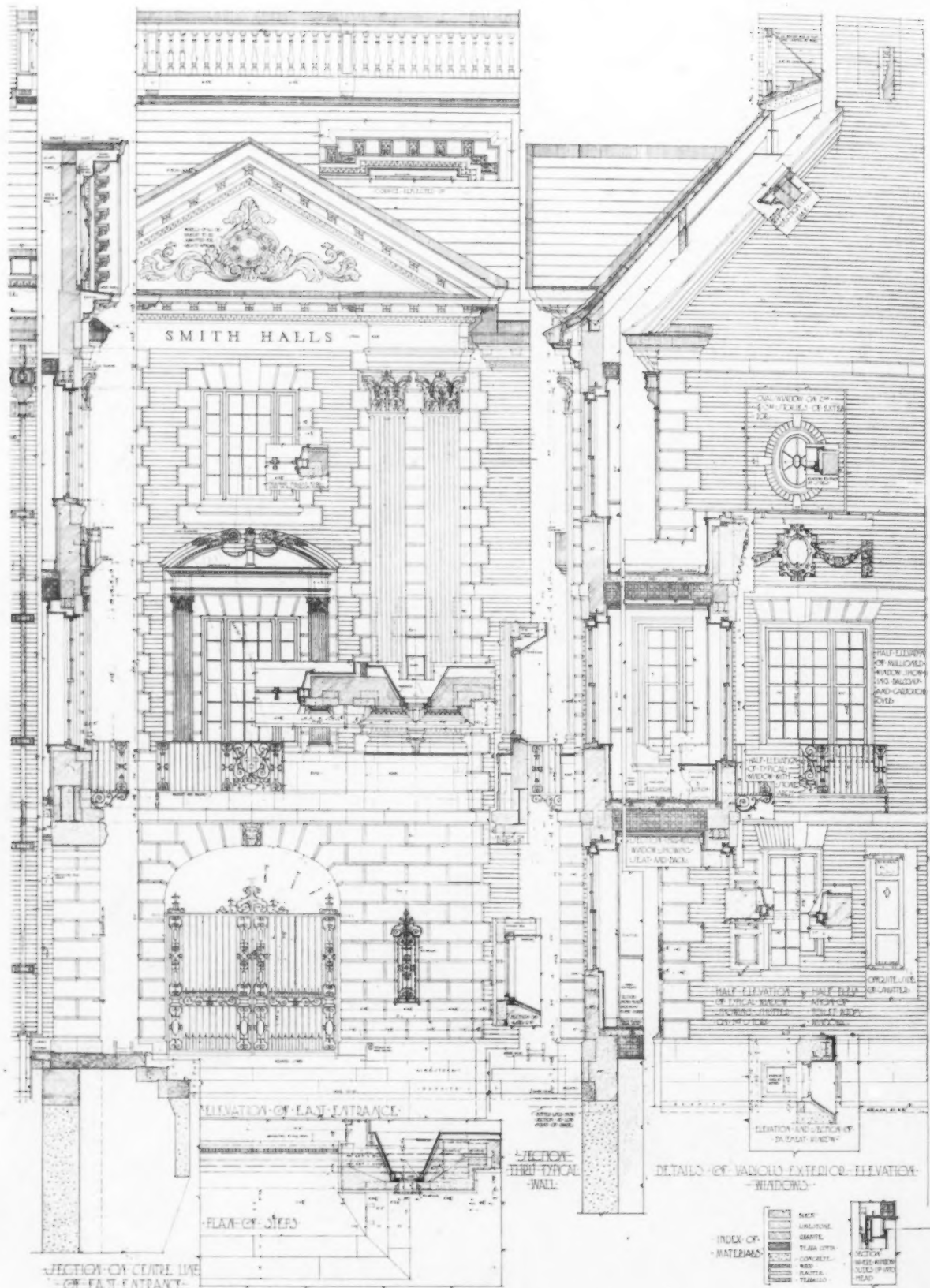
DOORWAY TO PERSIS SMITH HALL IN ARCHWAY LEADING TO QUADRANGLE

HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS



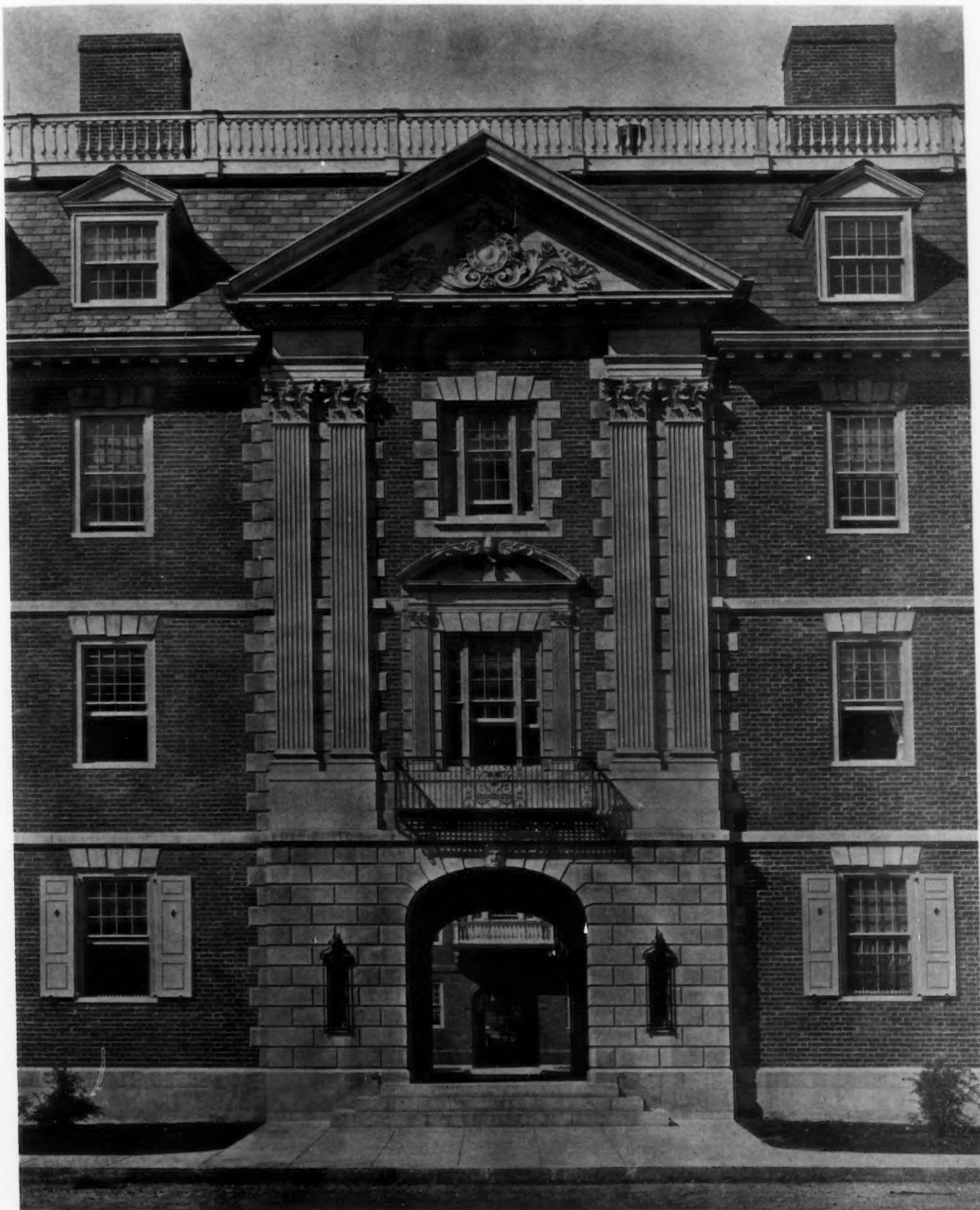
DETAIL OF CENTRAL ENTRANCE PAVILION OF GORE HALL
HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

Scale of Reproduction, 1 inch = 6 feet



DETAIL OF DUNSTER STREET FAÇADE OF JAMES SMITH HALL
 HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
 SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

Scale of Reproduction, 1 inch = 6 feet



DETAIL OF ENTRANCE TO JAMES SMITH HALL AND QUADRANGLE

HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.

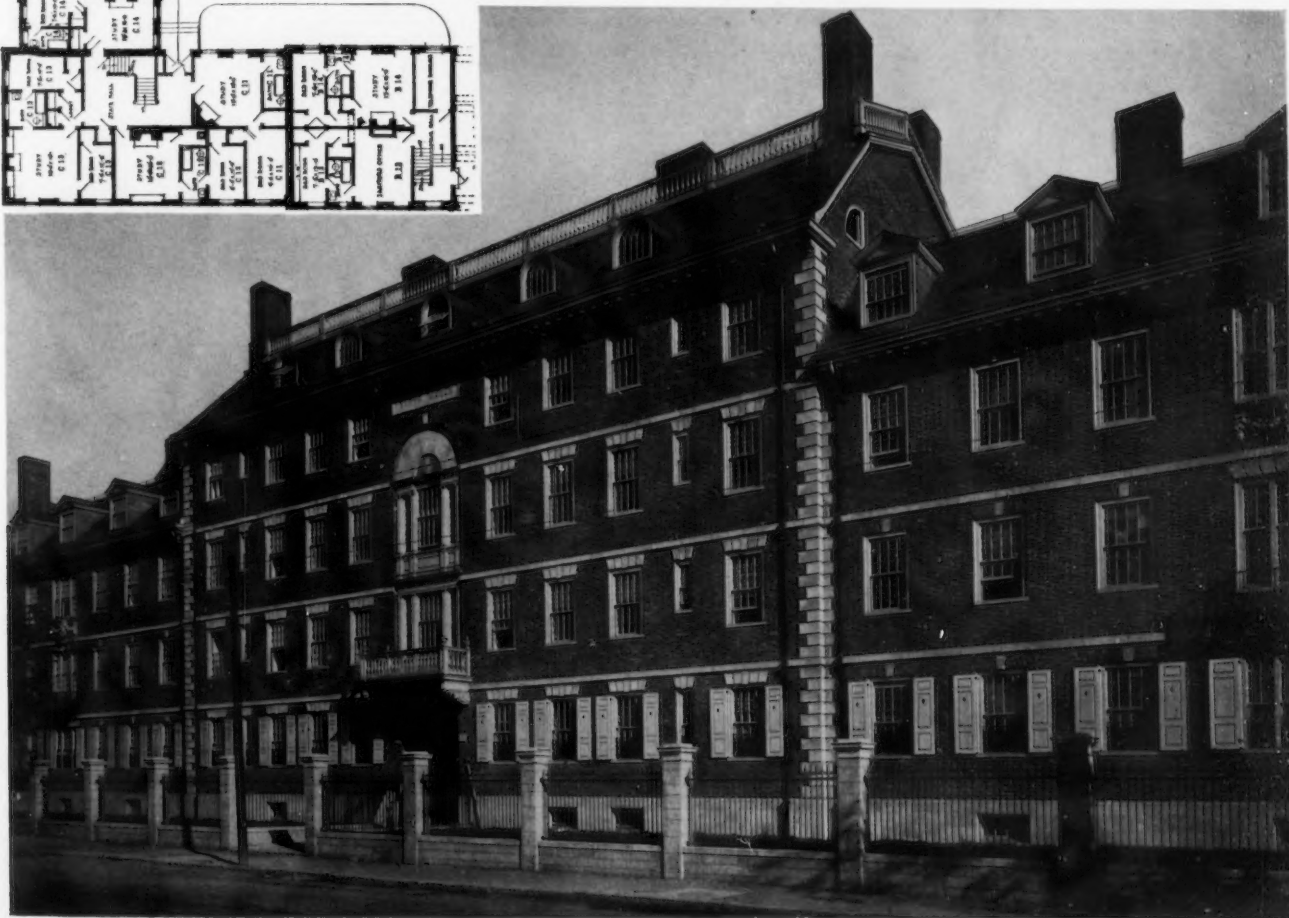
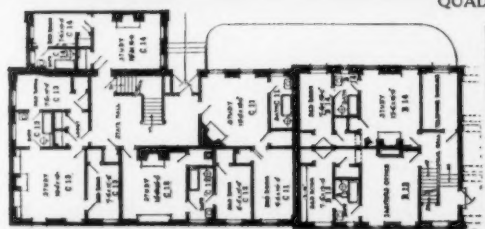
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

U of M

U90M



QUADRANGLE FACADE OF GEORGE SMITH HALL



BOYLSTON STREET FACADE OF PERSIS SMITH HALL

HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

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DINING HALL OF SMITH HALLS

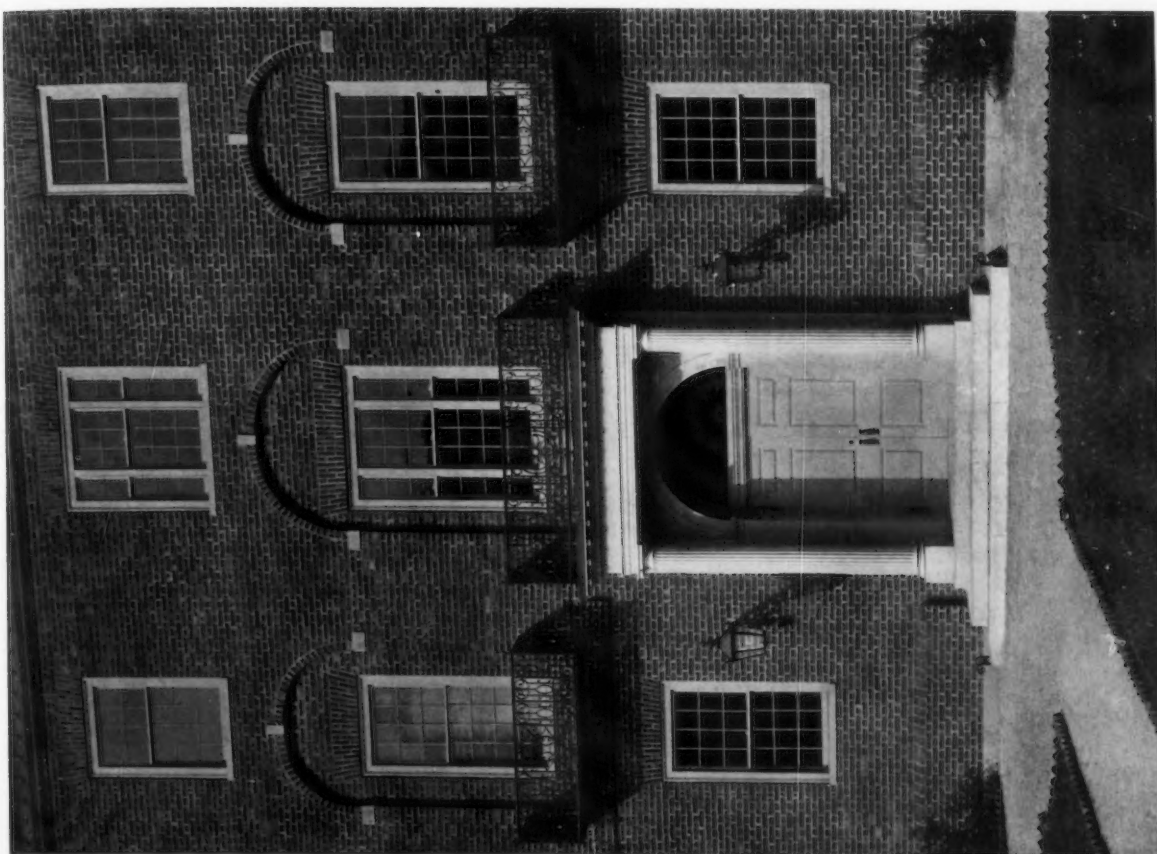


QUADRANGLE FACADE OF PERSIS SMITH HALL

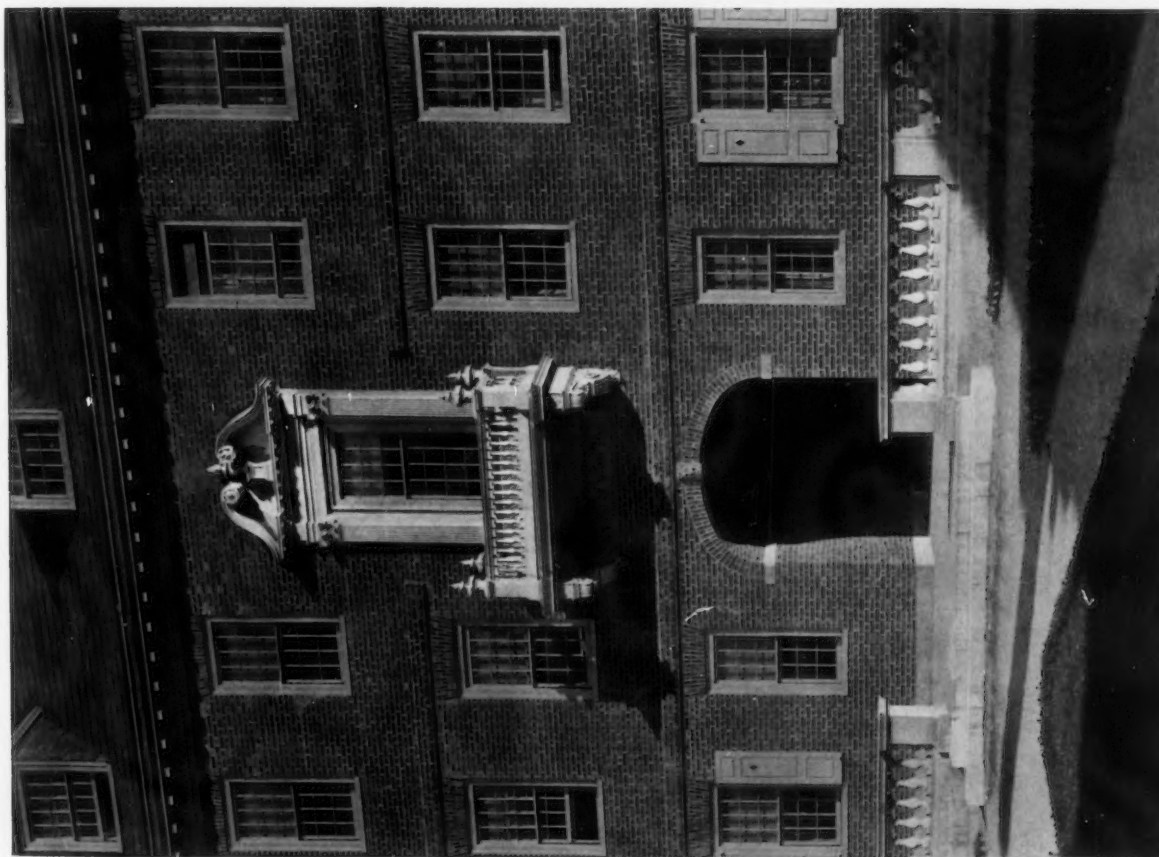
HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

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M30U



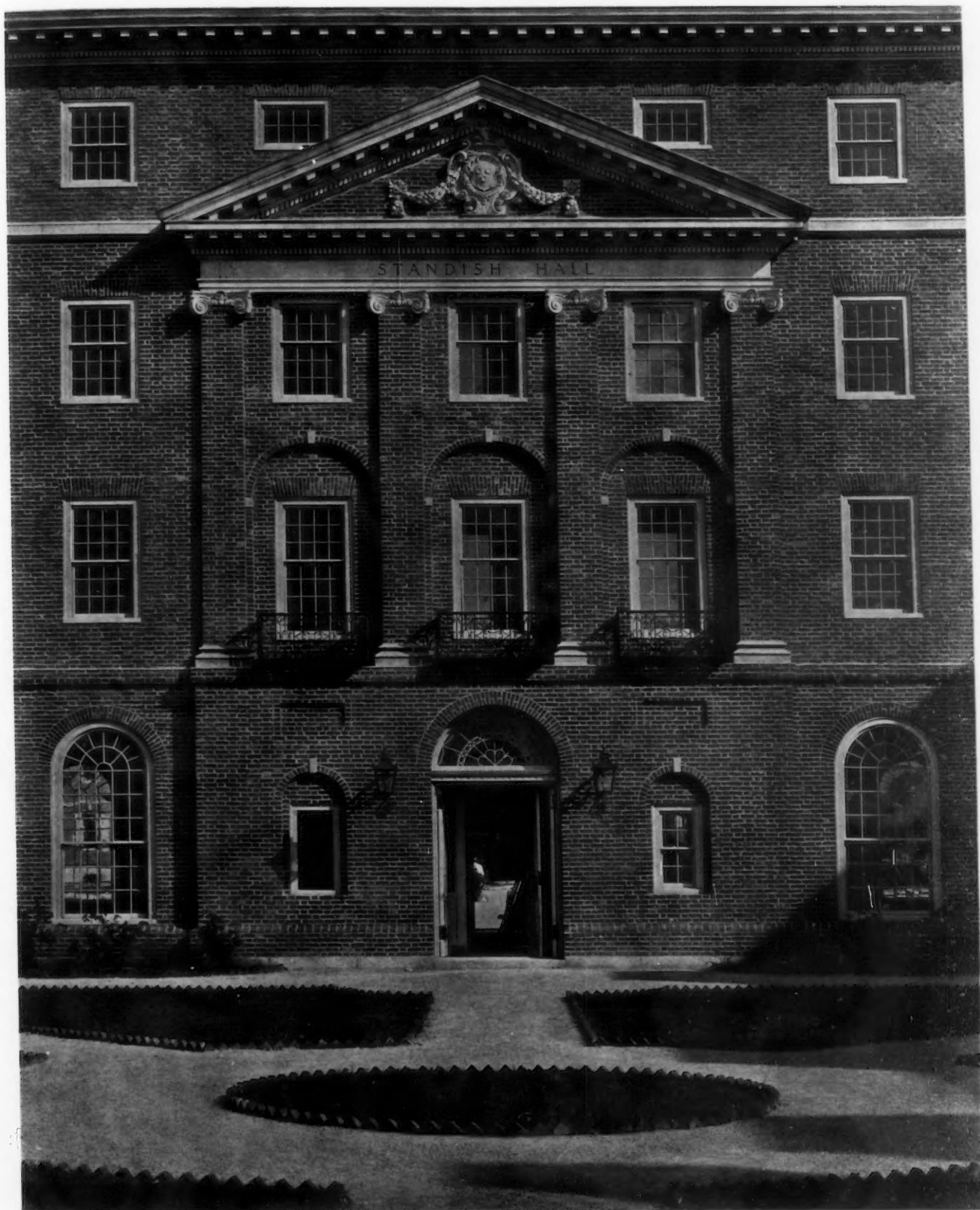
DETAIL OF ENTRANCE TO STANDISH HALL WING FROM COURT



DETAIL OF ENTRANCE TO JAMES SMITH HALL FROM QUADRANGLE

HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

U70U

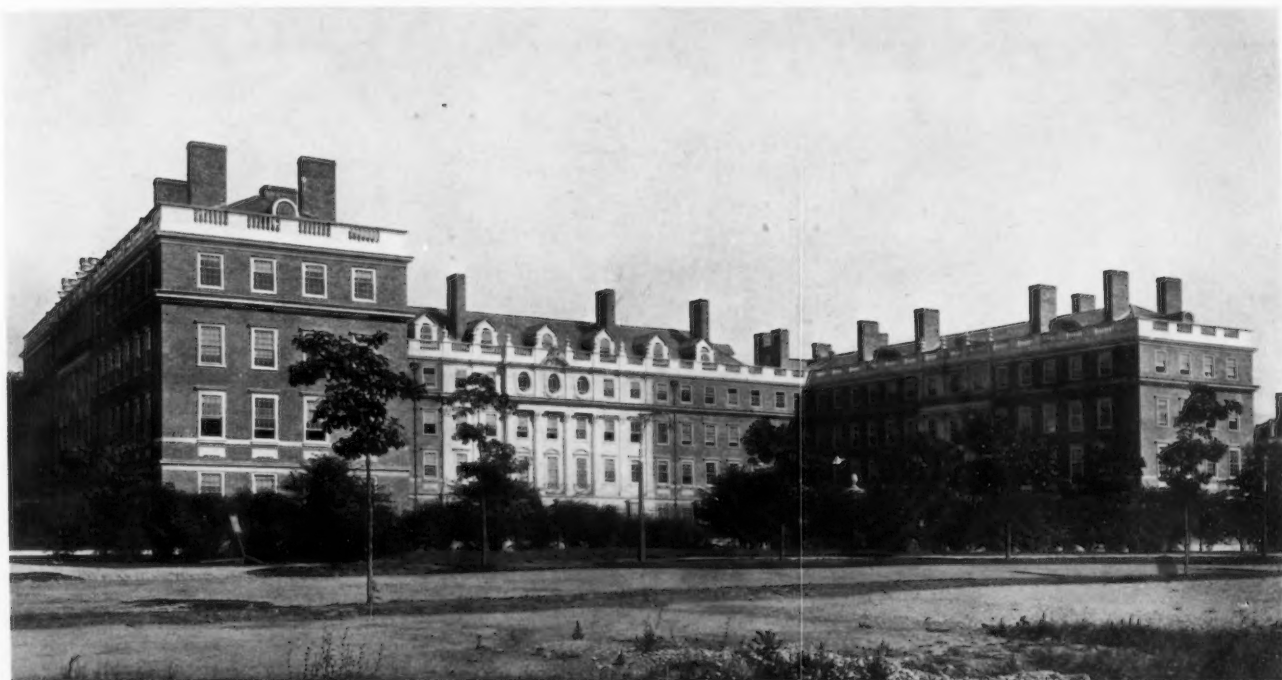


DETAIL OF ENTRANCE TO STANDISH HALL FROM COURT

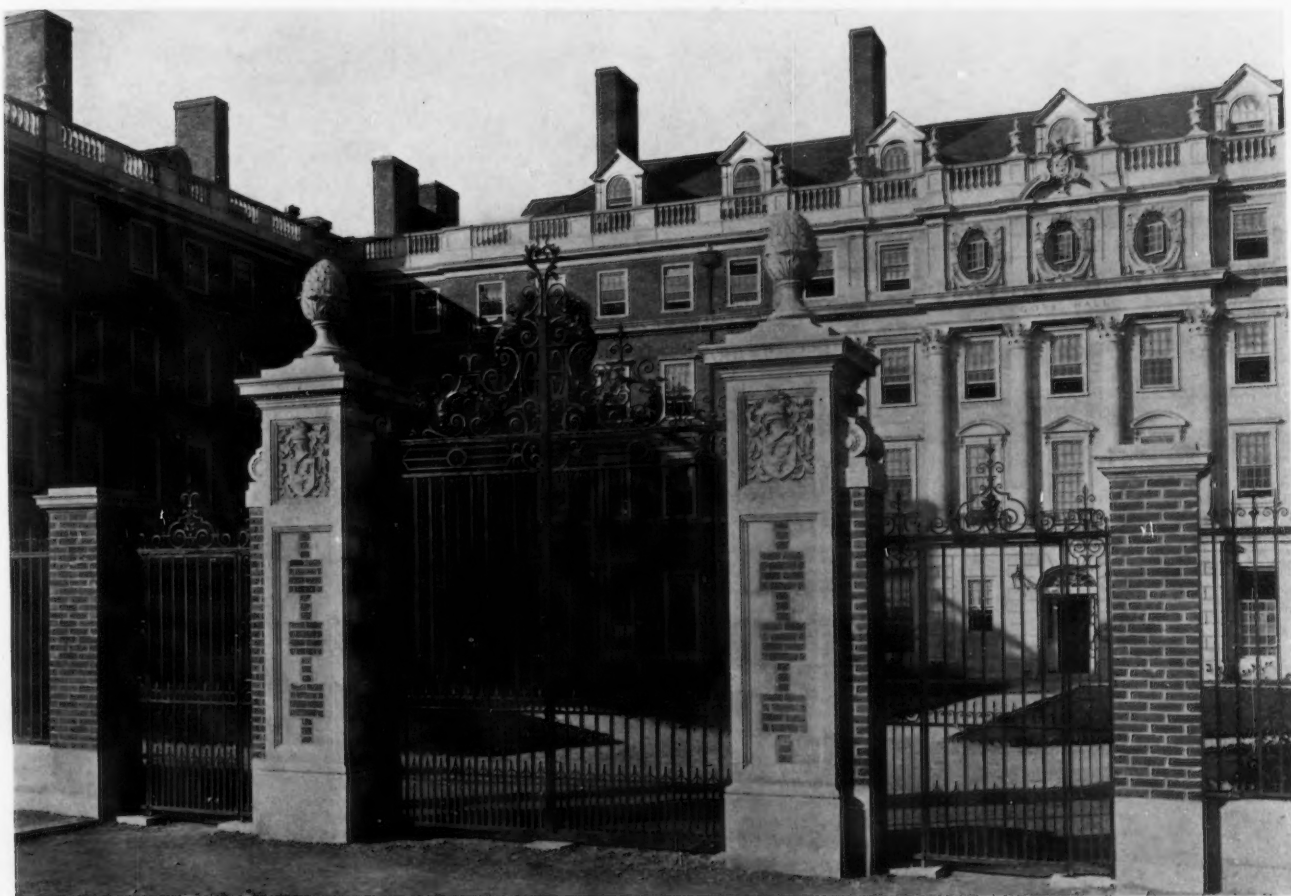
HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

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GENERAL VIEW OF COURT SIDE OF GORE HALL



DETAIL OF ENTRANCE GATES AND COURT OF GORE HALL

HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

1040



COMMON ROOM OF STANDISH HALL



COMMON ROOM OF SMITH HALLS

HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

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DINING ROOM OF STANDISH HALL

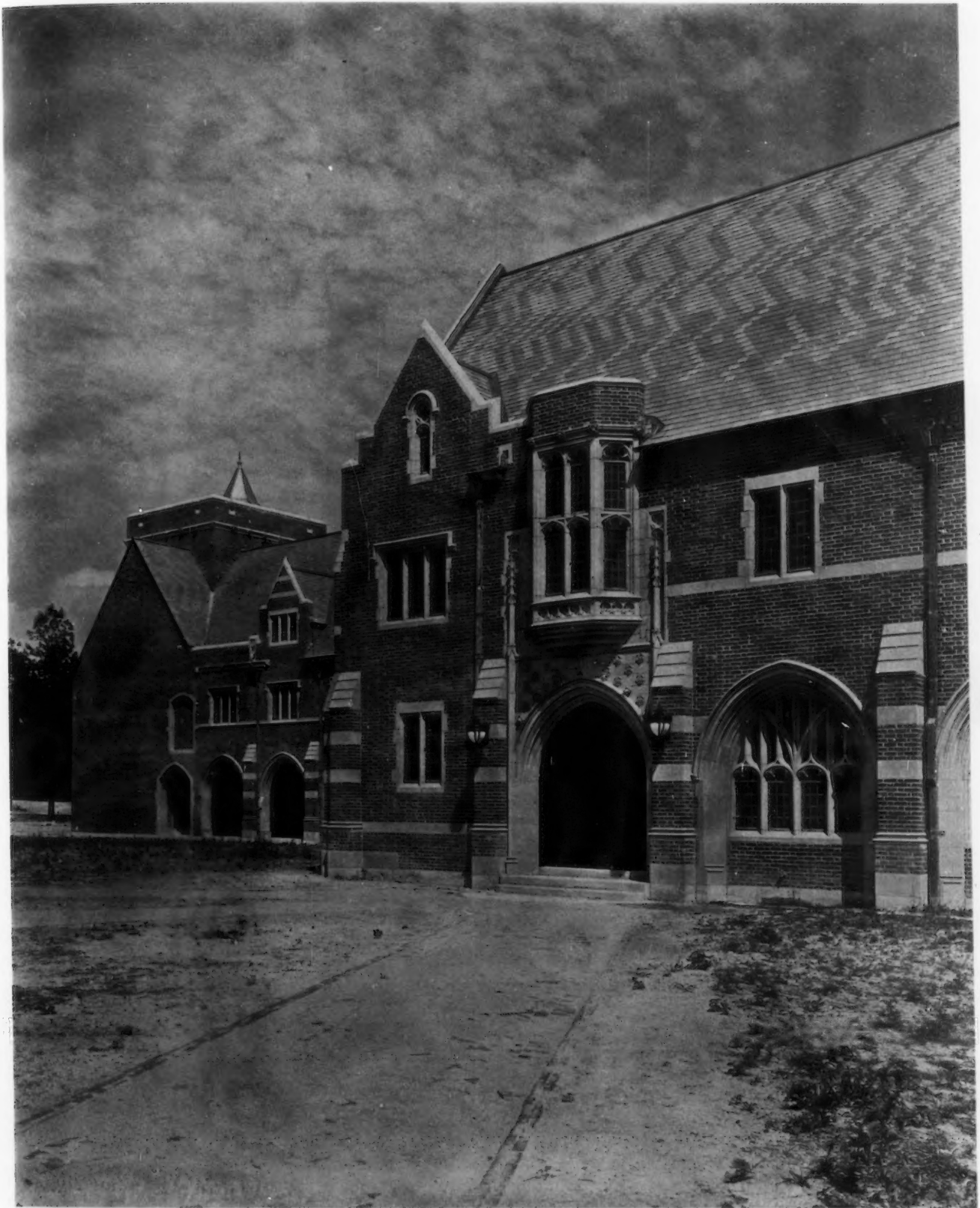


DINING ROOM OF GORE HALL

HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

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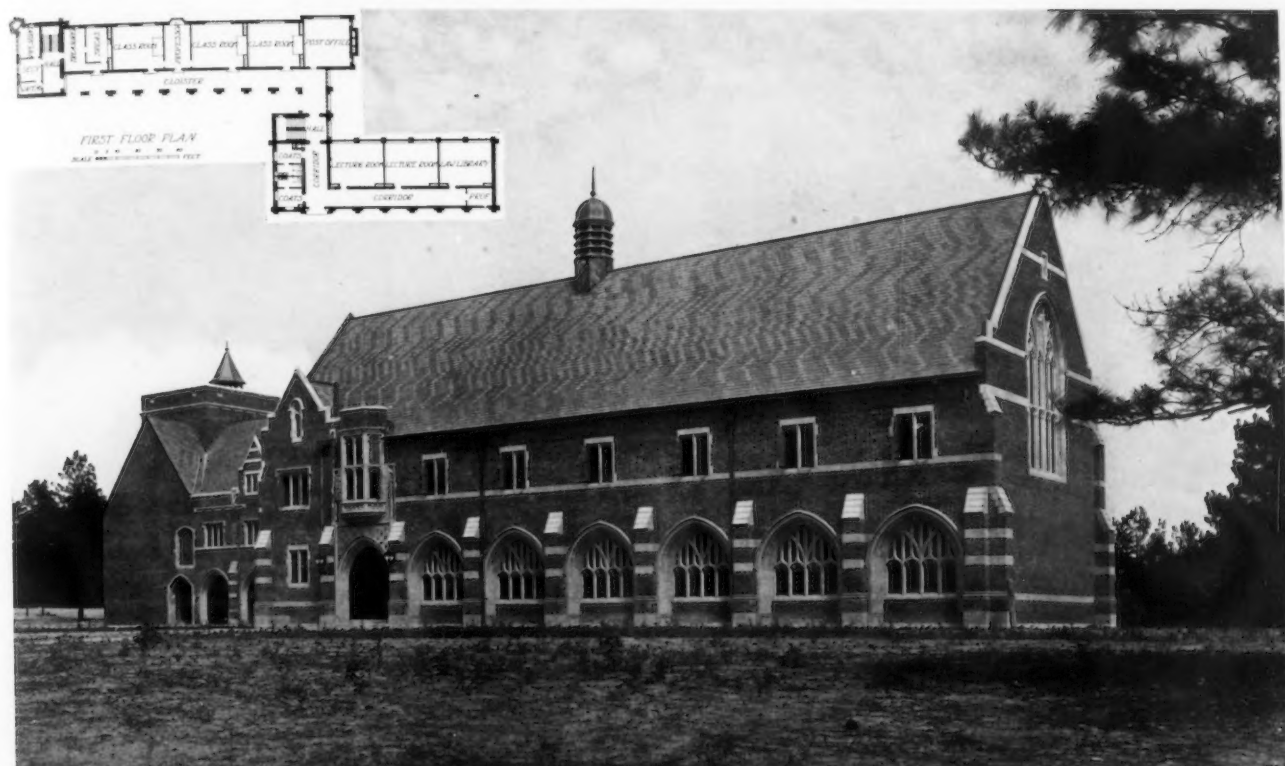


MAIN ENTRANCE OF LIBRARY WING, ACADEMIC BUILDING

RICHMOND COLLEGE, RICHMOND, VA.
CRAM, GOODHUE & FERGUSON, ARCHITECTS (BOSTON OFFICE)

U of M

U-100



LIBRARY WING OF ACADEMIC BUILDING



CLOISTER AND DORMITORY QUADRANGLE OF WOMEN'S COLLEGE
 RICHMOND COLLEGE, RICHMOND, VA.
 CRAM, GOODHUE & FERGUSON, ARCHITECTS (BOSTON OFFICE)

U.S. M.



TOWER AND WEST SIDE OF DORMITORY QUADRANGLE, WOMEN'S COLLEGE

RICHMOND COLLEGE, RICHMOND, VA.

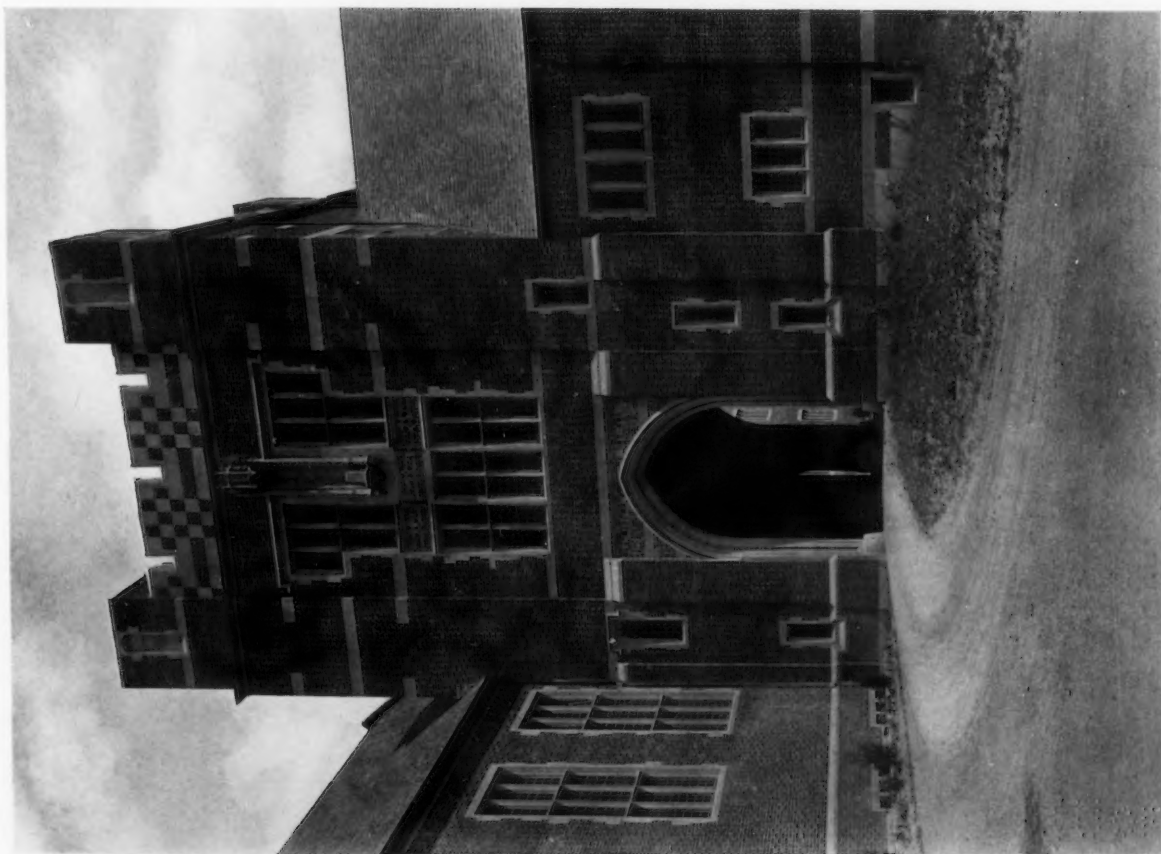
CRAM, GOODHUE & FERGUSON, ARCHITECTS (BOSTON OFFICE)

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ENTRANCE AND BAY OF COMMON ROOM, WOMEN'S COLLEGE

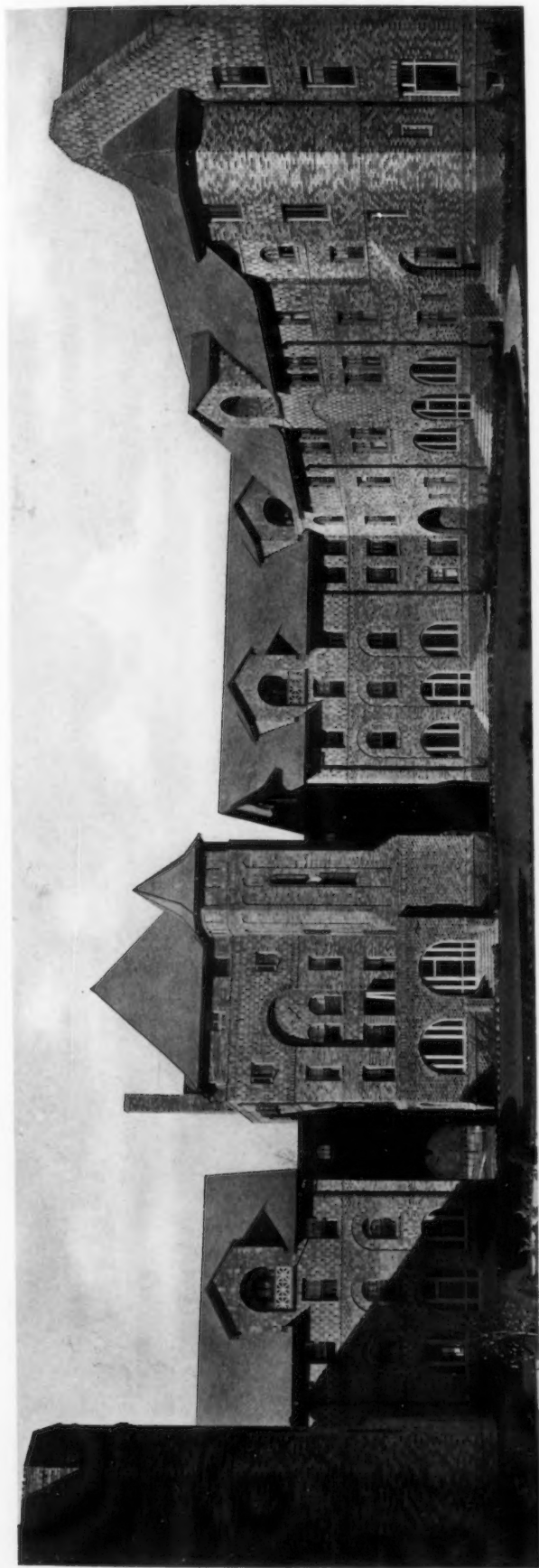


ENTRANCE TO DORMITORY QUADRANGLE, WOMEN'S COLLEGE

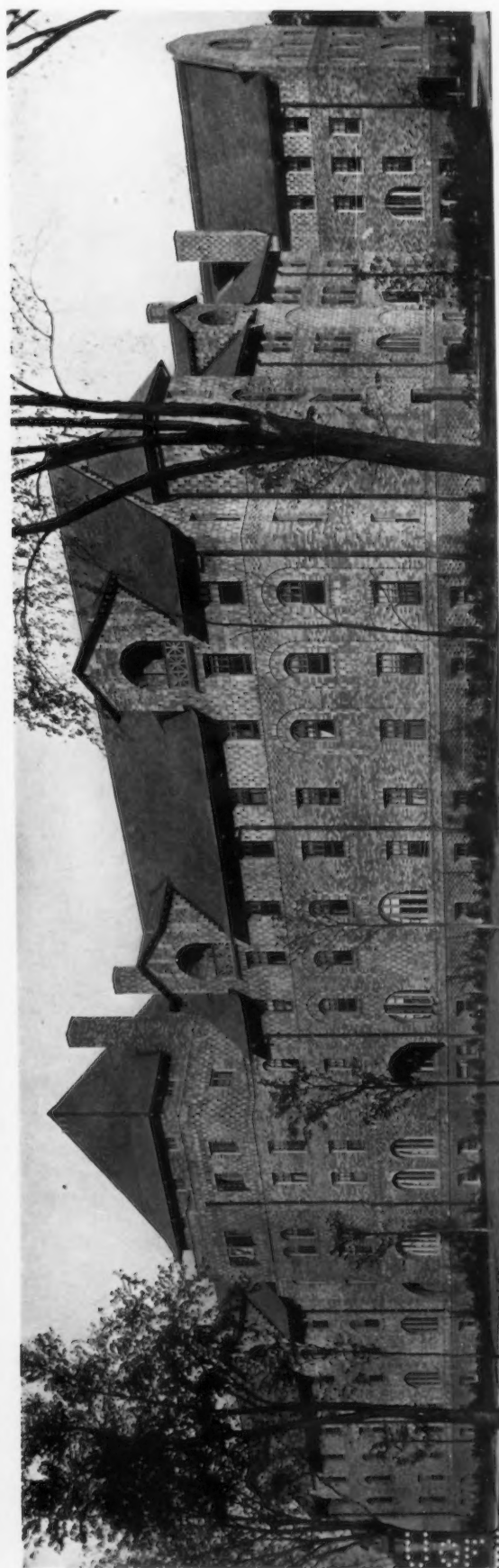
RICHMOND COLLEGE, RICHMOND, VA.

CRAM, GOODHUE & FERGUSON, ARCHITECTS (BOSTON OFFICE)

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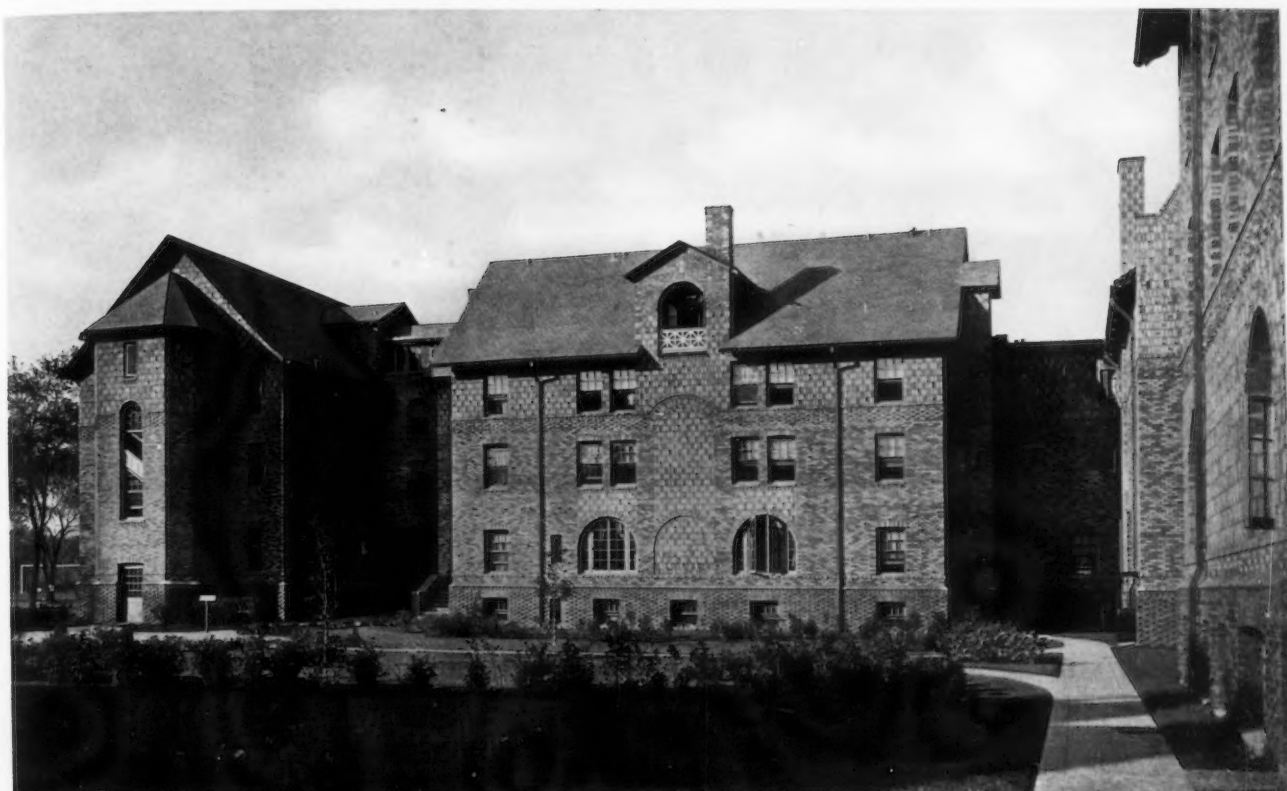
WEST SIDE OF QUADRANGLE



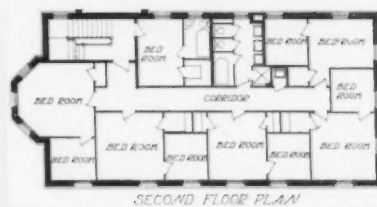
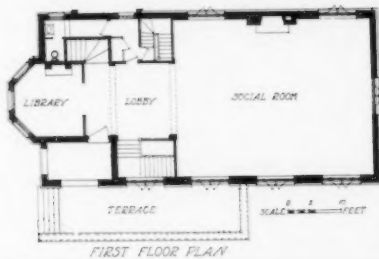
FAÇADE ON SHERIDAN ROAD

DORMITORY GROUP, NORTHWESTERN UNIVERSITY, EVANSTON, ILL.
PALMER, HORNBOSTEL & JONES, ARCHITECTS

UOLM



REAR VIEW OF BUILDINGS ON SOUTH SIDE OF QUADRANGLE

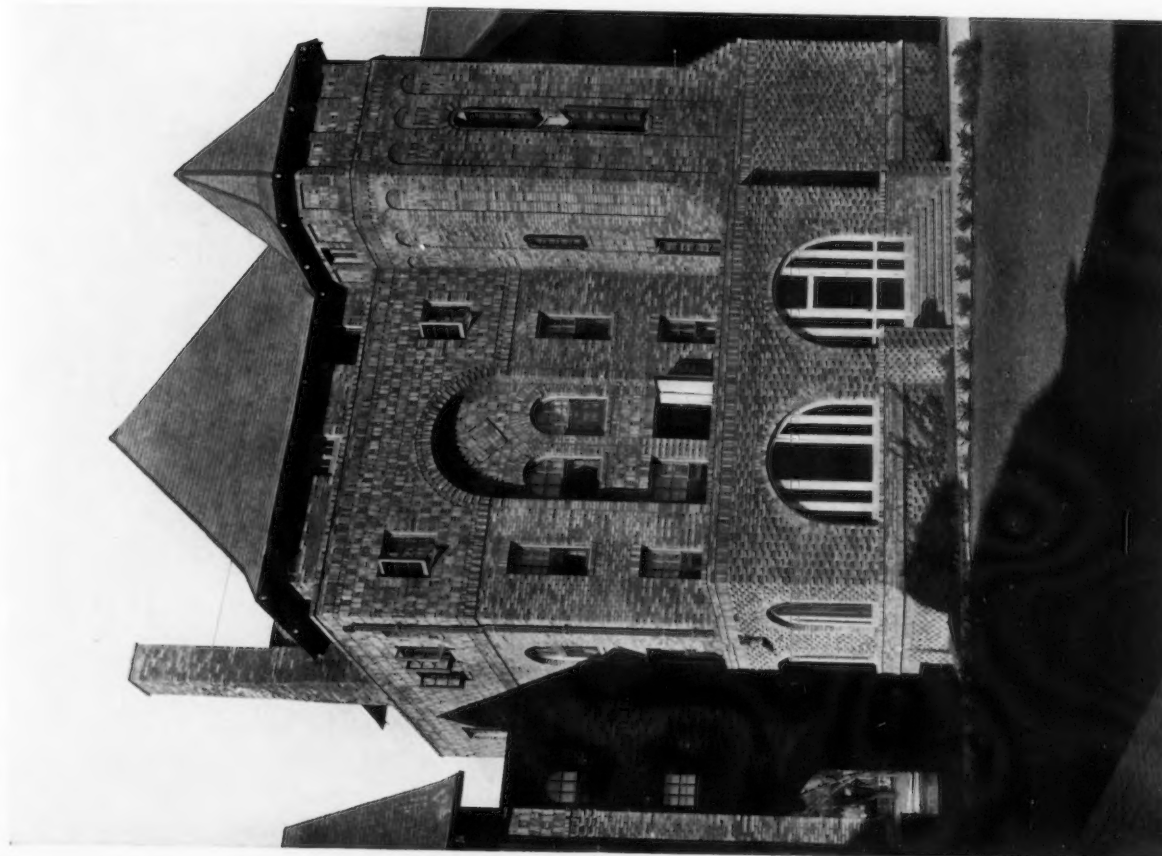


VIEW OF FRATERNITY HOUSES AT OPEN END OF COURTS

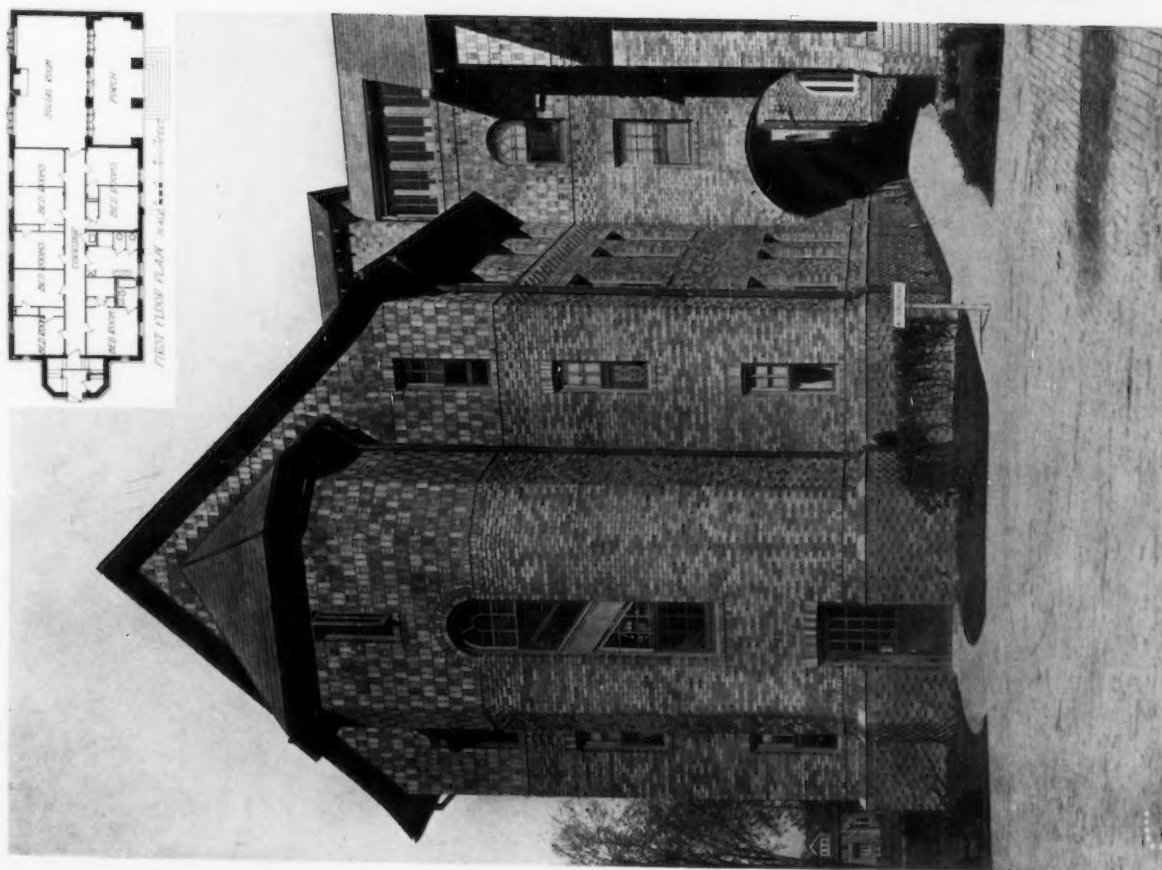
DORMITORY GROUP, NORTHWESTERN UNIVERSITY, EVANSTON, ILL.
PALMER, HORNOSTEL & JONES, ARCHITECTS

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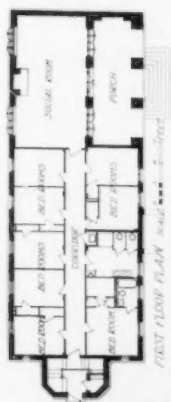
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DETAIL OF FRATERNITY HOUSE ON AXIS OF COURT



END OF BUILDING FRONTING ON SHERIDAN ROAD



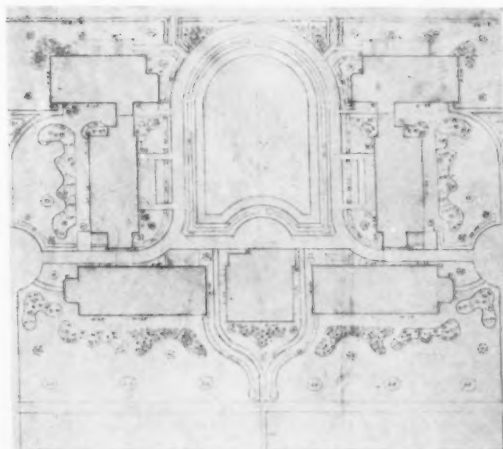
DORMITORY GROUP, NORTHWESTERN UNIVERSITY, EVANSTON, ILL.,
PALMER, HORNBOSTEL & JONES, ARCHITECTS

U30U

The New Dormitories of Northwestern University.

By WILLIAM D. FOSTER.

A NEW group of collegiate buildings is always a matter of interest to the architect, and of especial interest — almost curiosity — when the work is from the office of Palmer, Hornbostel & Jones. In this issue are published views of the first part of a new group recently completed by them at Northwestern University in Evanston, Ill. With not too great financial resources, but a pleasing location, the architects, by the use of brick, have succeeded in producing some very striking buildings of undoubted originality.



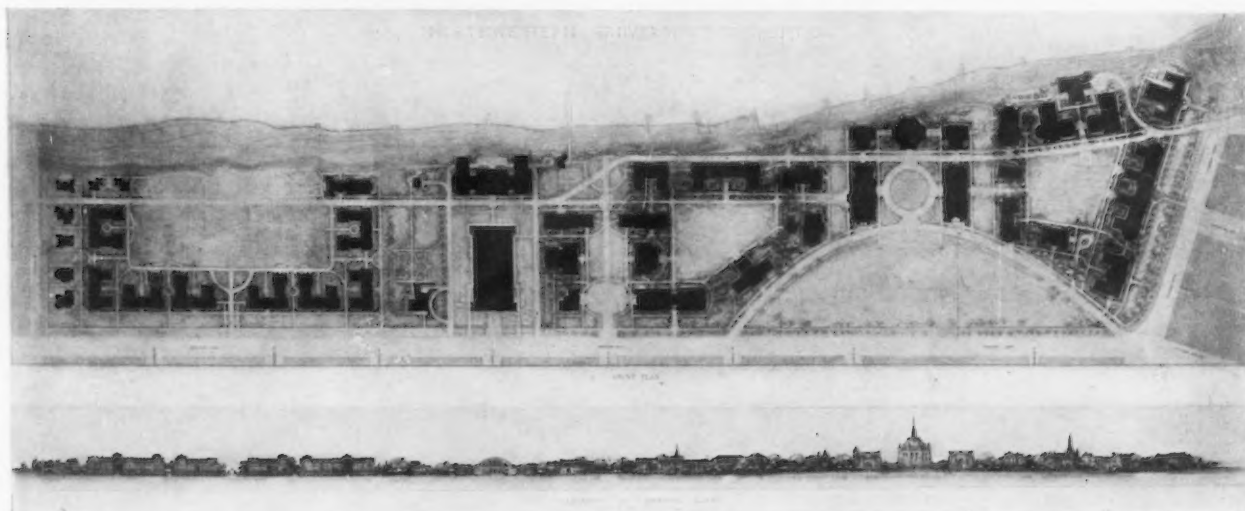
Block Plan of One Element of Group

The authorities of the university recently decided to follow the excellent example of other and far-seeing universities in the matter of building toward a definite scheme and having all new buildings fit into that scheme. With that purpose they held a competition for plans for the complete revision and new development of the whole campus. The land involved is a strip more than three-quarters of a mile in length and from 700 to 1200 feet in width, which runs north and south along the west shore of Lake Michigan, and is bounded on its long side by Sheridan Drive, an important interurban highway. The winning scheme, that of Messrs. Palmer, Hornbostel & Jones, contemplated the development of several cross axes, around each of which would be erected buildings more or less allied in their purposes; and the whole to be joined by one or two north and south roadways.

To the extreme north, in this scheme, were placed the living quarters, that is, the dormitories and fraternity

houses. These were first grouped to form a large quadrangle, with its open side facing Sheridan Drive, but with later study they were divided into four courts about 160 x 120 feet, with seven buildings to each court. The open sides of the quadrangles are on the east, affording a view of Lake Michigan for each building, and for all the living rooms complete privacy from the street. This idea of privacy has been adhered to, to the extent that not even those buildings nearest the roadway can be entered from that side. The spaces between these groups naturally form themselves into three minor courts, which open directly on to the highway, and are used for the service, thus isolating that function from the view of the living rooms. The buildings are about 250 feet from the bluff, which forms the lake shore at this point, and fortunately this stretch is to be developed to make the most of the unusual natural advantage of the site.

The buildings, of which eleven are now completed, are divided in their use: some are dormitories open to any male student of the university, while others are fraternity houses, which have been partially financed by the various fraternity alumni. The fraternity houses have been designed to suit individual tastes and therefore present considerable variety. The so-called dormitories or university owned buildings are more uniform. Each has on the first floor a large enclosed porch and delightful club rooms, and also a few students' rooms; while the second and third floors are given up entirely to single rooms.

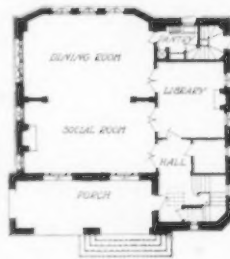


General Plan, Winning Competition Design for Future Development of Northwestern University
The Various Units in the Arrangement Reading from the Left are: Dormitory Group, Gymnasium, School Group, Chapel, Library and Museum Group, and Second School Group
Palmer, Hornbostel & Jones, Architects

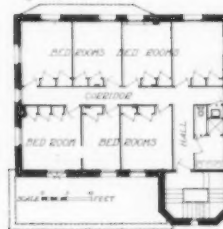
The fraternity houses have equipped themselves with kitchens and dining rooms, but the dormitories are entirely without such arrangements. This need is to be met in the future with a large university dining hall or commons, placed conveniently near the new group.

It is an interesting fact that while most of the universities which have recently planned new student housing systems have adopted the Oxford, or "stairway group" type of continuous buildings, nevertheless, in this case, after considerable thought and investigation, a continuous group is formed, but with each building as an individual unit. The continuity of the units is attained not merely by such subtleties as uniform height of openings and belt courses, and by uniformity of mouldings; but they are actually united by bridgelike connections.

As one approaches the buildings he is first struck by the unusual grouping of roofs and by the color and pattern of the brickwork. Although the view from the roadway is somewhat abrupt, that from the lake side shows an interesting composition where the more horizontal lines of the flanking buildings and their roofs lead up to the higher and more vertical one placed on the axis of the court. Interest is given to the somewhat rigid

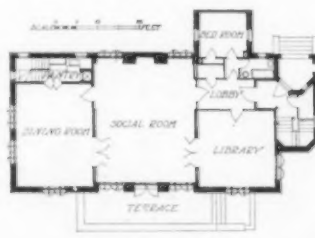
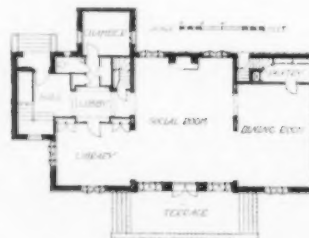


First Floor Plan



Second Floor Plan

Fraternity House, Northwestern University

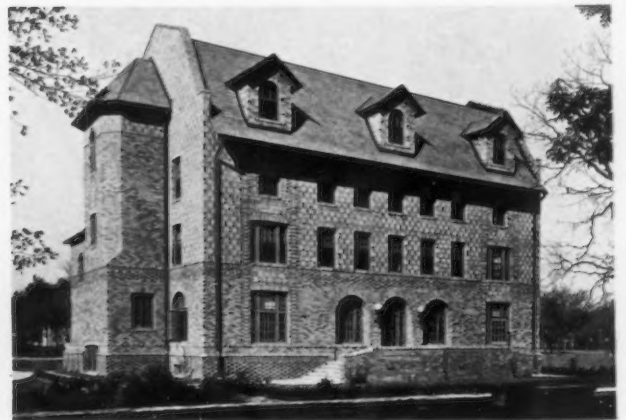
First Floor Plan
Of Fraternity House Shown BelowFirst Floor Plan
Of Fraternity House Shown Below

roofs by breaking them with gabled dormers. In this matter, as in all of the other smaller parts of the design, considerable attention has been directed towards variety.

The most striking point of the whole group is the color and use of the brick. Dull yellow and laid with a wide joint of similarly colored mortar, they give a mass of color which is relieved by contrast with the browns, blues, and bright greens used in the painting of the trim. Patterns occur freely in the brickwork to give texture and to form flat motives on the façades. The upper portions are laid in a diaper pattern under the projection of the roofs; while the basement walls are given scale by projecting the bricks and in some places using the flat sides in the pattern.

The beauty of the buildings will undoubtedly increase with the weathering of time and with the growth of vines, which will relieve what now appears as a rather large mass of dull yellow color. The completion of the rest of the courts will also give strength to the design by allowing a greater stretch

to the color and type which now stands in too small mass among other types of architecture. The real architectural value of the buildings lies in their originality, which, by giving satisfaction to the eye, does not startle, but attracts.



Two Fraternity Houses of Northwestern University, Dormitory Group
Palmer, Hornbostel & Jones, Architects

Monumental Treatment of the Fireplaces in the Harvard University Freshman Dormitories.

By DAVID E. FULTON.

THE architectural treatment of the large dining and common rooms in the Harvard University Freshman Dormitories is specially worthy of note in that it points out clearly that the work of the American Colonial and English Georgian periods is capable of a great variety of interpretations, making it possible to design a number of rooms of similar purposes that will be absolutely congruous and yet vary the treatment to such an extent that each apartment will have a distinct individuality.

For creating an intimate and domestic feeling in an interior there is probably no style quite so fruitful as the Georgian and, likewise, there is no period in which greater artists were developed whose work can be drawn upon for inspiration with assurances of greater success. The renaissance of architecture in England came about with the introduction of Palladio's conception of classical forms and proportions, under the encouragement which the Stuarts gave to art. The foreign influence was cultivated by Inigo Jones, whose work in turn was taken up and further developed by Sir Christopher Wren. The latter had his great opportunity presented to him in the rebuilding of London, after the great fire, and with such incomparable craftsmen as Grinling Gibbon in wood carving and Jean Tijou in metal work, aided by the encouragement of the reigning sovereign, he developed architectural forms of great magnificence. It was during this period that the art of interior design reached a high and logical stage, and the beautiful plaster work, wood carving, and paneling of the interiors created by these men furnish rich precedent to guide the architects of to-day in similar work, which it is pleasing to note is claiming more and more of their best thought and talent.

The common rooms in the various buildings of this group are a distinct addition to American interiors, and a careful study of the results attained in them should be helpful in creating more work of equal merit in this interesting field. They are composed of extremely simple elements,—the long sides are broken up with regular and well proportioned fenestration, the entrance is at one end, and the fireplace on the same axis at the opposite end. This arrangement makes the fireplace the focus of attention upon entering, and it is in the treatment of the chim-

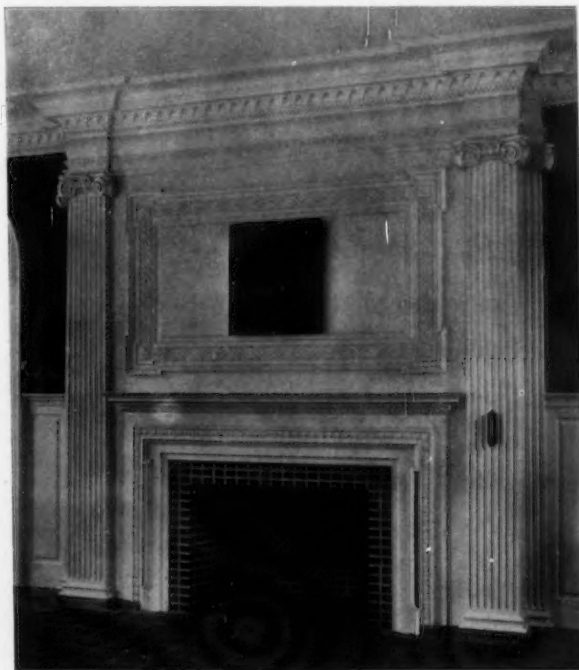
neypieces that the architectural accent of each room is struck.

The mantels in the dining rooms of Standish and Smith halls are executed in white enameled birch and are a free adaptation of Colonial forms. The band of pierced wood framing the panel in the overmantel of the fireplace illustrated on this page is an adaptation of the fretwork used so commonly by Chippendale in much of his cabinet work of the period, and while its use in this manner is unusual it certainly is interesting and appropriate enough. This mantel and the one in Smith Halls common room may be considered structural, inasmuch as they occupy the full height of the wall and depend upon the room cornice to complete them, thus making one continuous treatment for all walls. In the other rooms the mantels are isolated, although they bear a recognized relation to the paneling and other details.

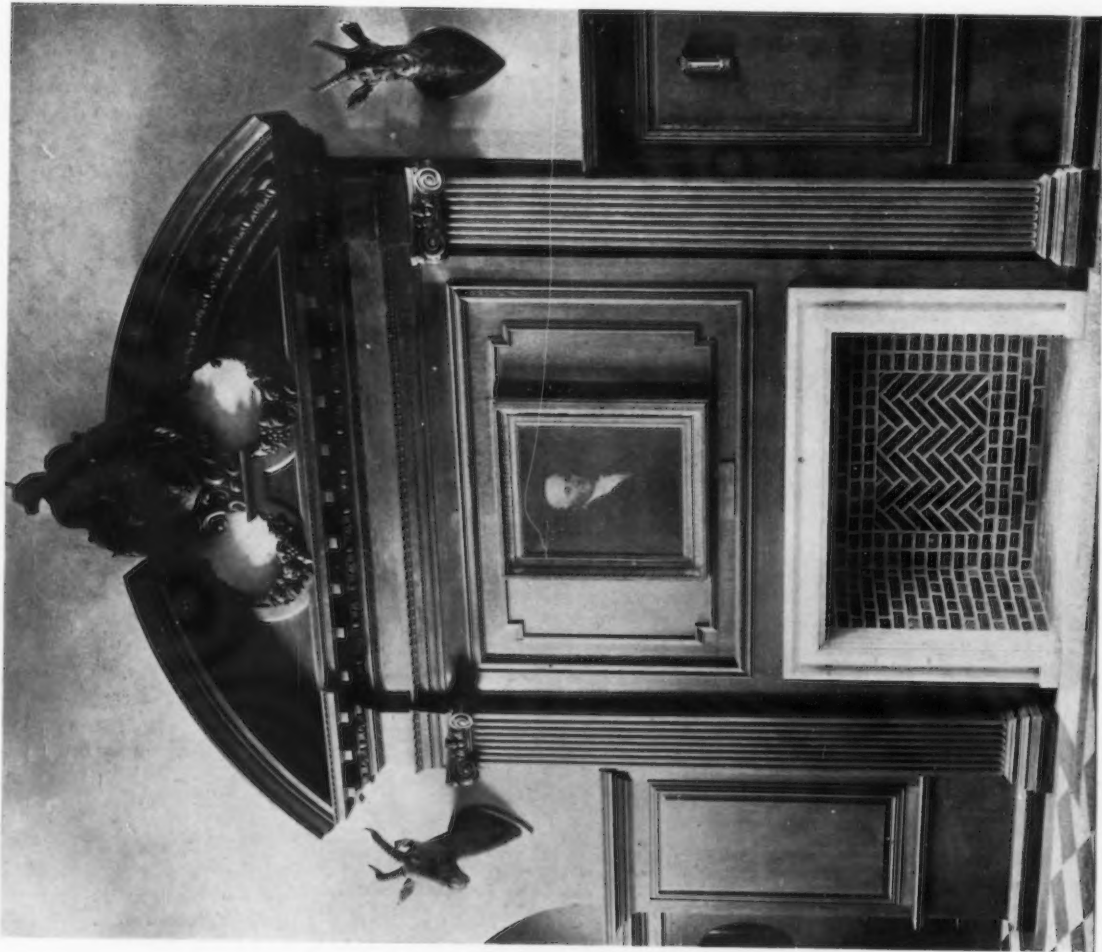
The end wall of the room in each case has been brought out to the plane of the chimney breast, but arched or low ceiled recesses at either side in which are placed subordinate doors or built-in seats indicate the necessary wall thickness to take care of the flue. This overcomes the awkwardness of the projecting chimney breast and permits all horizontal lines to appear continuous in perspective, which is impossible in the usual treatment. This, furthermore, permits a broader treatment of the chimney-piece itself, when it is desired, without reducing the apparent size of the wall spaces at either side or endangering their proportions, as evidenced in the mantel of Smith

Halls common room. This, in many respects, is the most interesting and, without doubt, the most impressive of all the mantels. The well proportioned pilasters with the beautifully carved Corinthian capitals frame, in a most dignified and architectural manner, the central portion of strikingly grained oak on which is carved the seal of the university surrounded by a graceful festoon of fruits and flowers after the manner of Grinling Gibbon.

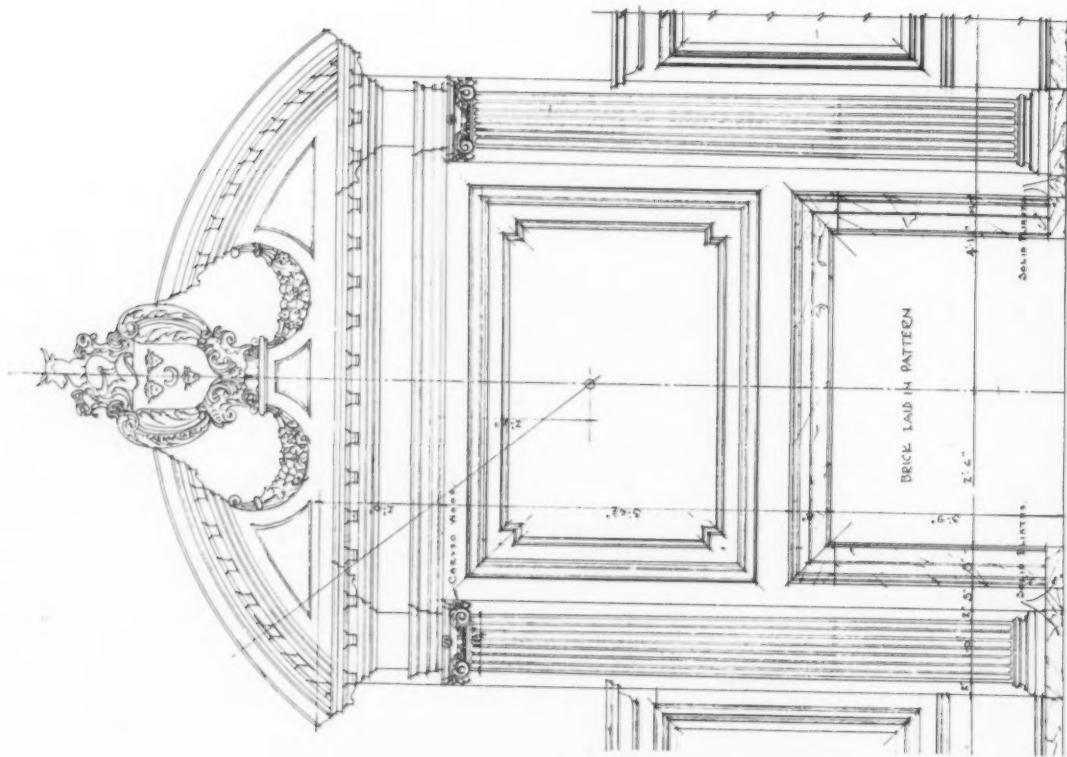
These chimneypieces are examples of successful architectural treatment because they very fittingly provide the focal point of the interiors and as individual elements of the design display the rules of good proportion and accord in scale with their surroundings.



Fireplace in the Dining Room of Smith Halls



Fluted pilasters support a bold cornice and broken curved pediment, the intervening space of which is filled with a cartouche and festoons of flowers, curved in oak. The opening is

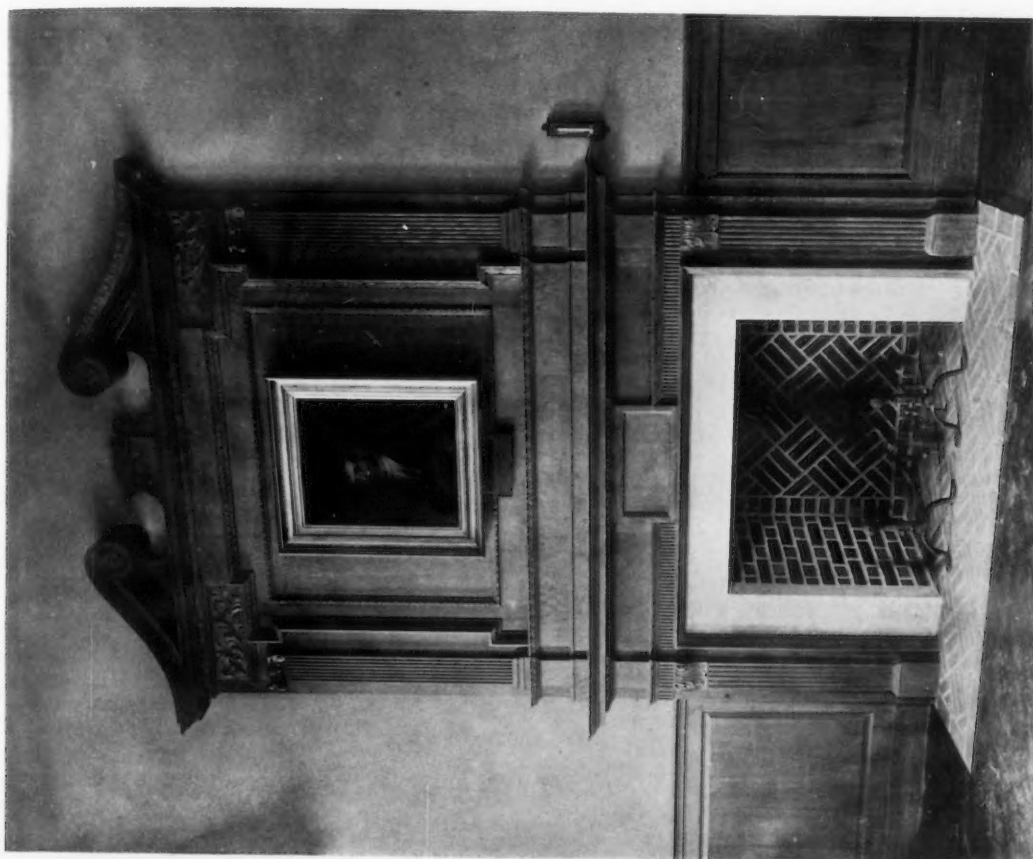


mantel is accentuated by the absence of the usual strong horizontal division made by the mantel shelf, which, if used, would be difficult to reconcile in this instance.

FIREPLACE IN DINING ROOM OF GORE HALL

HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.
SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS

Reproduction of the original drawing by the architects.



This interesting chimneypiece follows the period of the late English Renaissance in its general design and proportions. All projections have been kept flat and the carving reduced to a minimum. It is executed in oak, treated only with a filler, making the mantel appear to advantage against the gray green plaster wall.

FIREPLACE IN COMMON ROOM OF STANDISH HALL

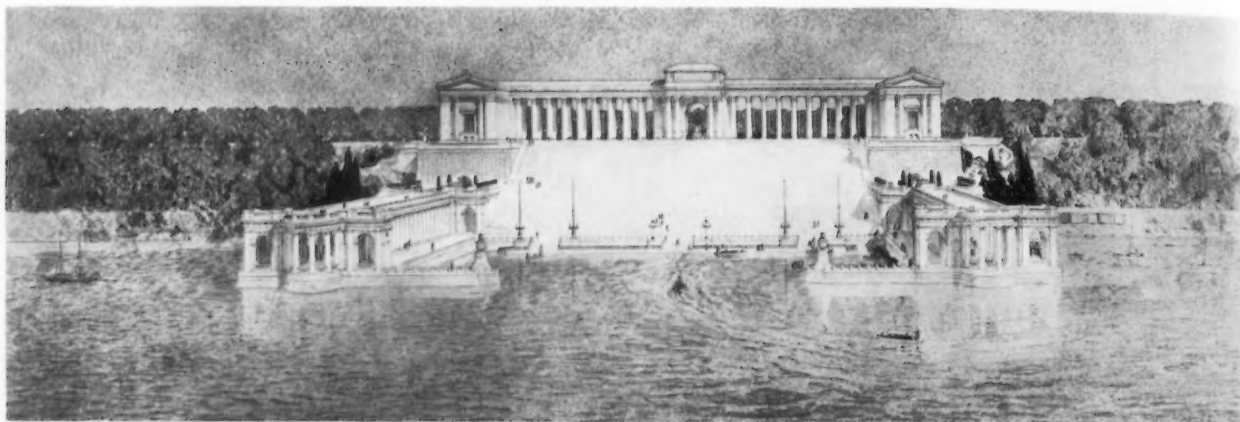
HARVARD UNIVERSITY FRESHMAN DORMITORIES, CAMBRIDGE, MASS.

SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS



In this example the whole height of the room has been embraced as the unit of the design. It has a broad and large scaled appearance to accord with the bold paneling of the walls. The opening is enclosed with a heavy moulding of stone and the overmantel is enriched with the university seal and strongly carved festoons.

FIREPLACE IN COMMON ROOM OF SMITH HALLS



Water Color Drawing of Winning Competition Design for the Robert Fulton Memorial, New York, N. Y.
H. Van Buren Magonigle, Architect

Birch Burdette Long, Delineator

Monographs on Architectural Renderers.

BEING A SERIES OF ARTICLES ON THE ARCHITECTURAL RENDERERS OF TO-DAY, ACCOMPANIED BY CHARACTERISTIC EXAMPLES OF THEIR WORK.

X. THE WORK OF BIRCH BURDETTE LONG.

THE work of Mr. Birch Burdette Long is so universally and deservedly well known, that the editor has for a long time hesitated to include him in this series, feeling that there could be little said about him with which every one was not already familiar. But, as the different articles have been written, the writers have so frequently used Mr. Long's work as a basis of comparison with that of other men, to complete the series it has seemed necessary to include his name. Such comparisons between his work and that of other renderers would appear to be inevitable, since Mr. Long has worked in all mediums and in several manners, covering pretty nearly the entire field of architectural renderings, and there are therefore few men whose work does not at some point touch his. These comparisons are seldom to Mr. Long's disadvantage, for he is quite as much at home in one method of rendering as in another, and the standard he has set is so high that he is, more than any other one man, responsible for the excellent pictorial quality of American perspective rendering.

A few words about his career will be enough: he began his work as a draftsman in one of the Chicago offices, soon after the beginning of his career, and worked for some time under Frank Lloyd Wright, doing renderings for other men concurrently. He won the Chicago Architectural Club's Travel Prize, spending a year in Europe, and on his return settled down in New York as an architectural renderer without a connection with any office, and for the last ten years he has been continuing that work in New York. About six months ago he became associated with Mr. Fellheimer, formerly of the firm of Reed & Stem, and is now a practising architect as a member of the firm of Long & Fellheimer.

It may be worth while to say something about his architectural ability. While he has prior to his connection with Mr. Fellheimer done very little independent architectural work, the little that he has done has shown very

great ability, and those architects for whom he has rendered drawings will unanimously bear testimony to the helpfulness of his criticisms.

Of course, there are many men who can give an excellent criticism who are incapable themselves of design; but it will be realized that criticism which is constructive and helpful, not alone because it points out the bad things in design, but also indicates ways for their improvement, is invariably indicative of ability to design. It is this sort of criticism that Mr. Long gives: his taste in color schemes is of course exquisite, and he seems to know instinctively the precise degree of vividness of color which should be used in conjunction with given materials or at fixed heights above the eye. In matters of scale he is not less capable, and he has also real constructive feeling. A good color sense and a good idea of scale might not necessarily indicate a capable designer, but only an artistic personality; add to these, however, an instinctive feeling for structure, and the result must be a very capable architect — all these qualities Mr. Long has.

His first piece of work, which he executed by himself, was a shelter in one of the parks in Chicago, and his own account of the difficulties he got into over that work are very amusing. It seems that at the time he was a draftsman in Mr. Wright's office, and won this commission in competition with a design even more *outré* than Wright's work; the columns were striped red and white, like candy poles; the roof was a combination of Japanese and "Chicagoese" architecture, and when it was finally built in a rather prominent location, nobody knew what to make of it — in consequence nobody liked it much. The papers had letters about it, and even editorials regarding the disfigurement of public property, and yet from the photographs of the structure which the writer has seen, it seems to have been a very charming and appropriate little building, not easily to be classified under one of the architectural schools perhaps, but filled with a playful charm and gaiety of compo-

sition which may be singularly appropriate to its position and its purpose.

The next independent piece of work which Mr. Long did that has come to the writer's notice is his own house at Peekskill done fifteen years or more after his park shelter. This shows the complete revolution wrought in the designer's mind by fifteen years of training, and perhaps also by the difference in environment between New York and Chicago. The Peekskill house is, in a sense, quite as free and cheerful architecture as is the park shelter in Chicago, but it is solidly based on the Colonial farmhouse precedent, and is treated with an admirable adaptation to a very difficult site, which would have been the despair of most architects, but which to Mr. Long only offered an inspiration.

Now from Frank Lloyd Wright to Colonial is a far cry, but it is no farther than Mr. Long has traveled in his renderings. Most of the early drawings made in Mr. Wright's office followed in principle the Japanese prints: they were line drawings in pen and ink with the surfaces washed over in flat tones, and a comparison of one of these early drawings, beautiful as it is, with the sober, scholarly rendering of the Hudson Fulton Memorial, shows how far removed is his maturer work from that of his earlier days. Yet he has never forgotten, nor even completely abandoned, his earlier technique, although at the present time he uses it only for drawings whose subjects and surroundings are suitable to it. He can still be as Japanese as Japan itself when he has to render a tea house in the woods and wishes to secure extreme pictorial quality; but he no longer at-

tempts or desires to attempt to render monumental architecture in so playful a way. Through all his renderings, however, the gay, the trivial, and the serious, there runs one single strain of color composition; he is never blatant nor dashing, and yet the subdued and quiet tones of his pictures cannot be killed by the noisiest and most brilliant drawings, in no matter how close juxtaposition they may be hung.

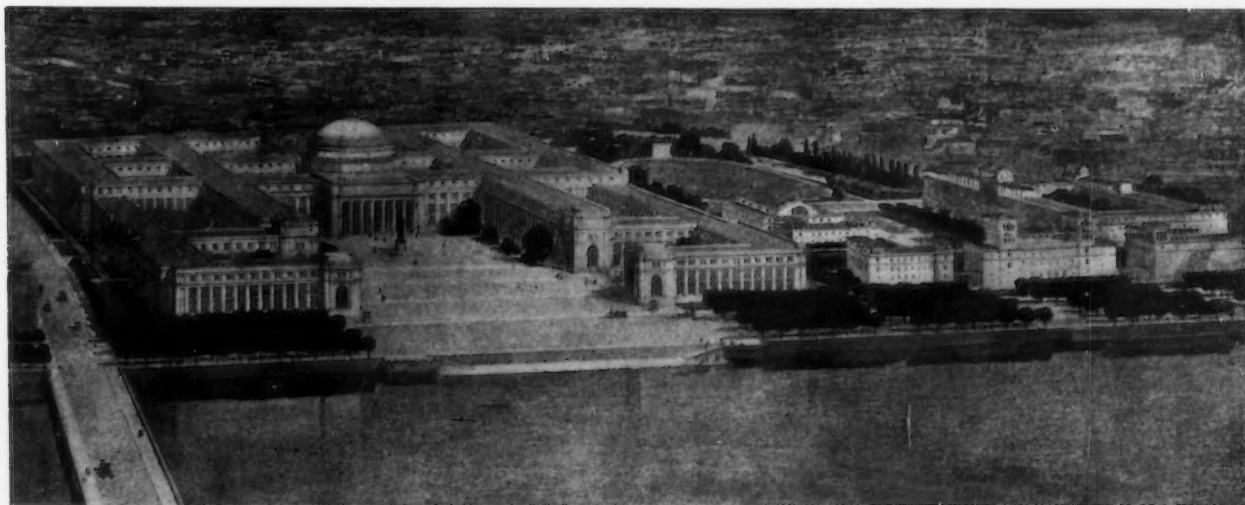
Those who have followed the recent exhibitions will remember some large, quiet drawings he made of the Massachusetts

Institute of Technology for William Welles Bosworth. They are built up of pale, flat tones with shadows only faintly indicated, and with no accents whatsoever; yet they convey an impression of luminosity, perspective, and atmosphere of a surprising depth and quality. One has the impression of a group of serene and lofty buildings, seen under the pale light of a northern sky in a quiet and ordered city; and all this by the use of a few flat washes and occasional fine pen lines in diluted ink. Compare these drawings with the large rendering of the San Diego Exposition made for Mr. Goodhue, and note the difference in quality of the two; one feels the hot sun of California reflected from brilliant colors and half barbaric architecture. There is a richness and depth in the coloring, and yet on analysis we find that the positive tones of the colors are not very much strengthened, or more than slightly intensified, but that Mr. Long, by subtle differences in the grouping of the colors, has achieved an effect radically different from the drawings of the Institute.



Water Color Drawing of Cathedral of the Incarnation, Baltimore, Md.

Bertram G. Goodhue, Cram Goodhue & Ferguson, Architects
Birch Burdette Long, Delineator



Water Color Drawing of the Massachusetts Institute of Technology Group, Cambridge, Mass.

William Welles Bosworth, Architect

Birch Burdette Long, Delineator

These drawings, like all others of Mr. Long's, possess his distinguished qualities: his work is never bold, coarse, or violent; it is rather precise, delicate almost to daintiness, and refined to the edge of fragility; but its exquisiteness never falls into weakness, and we feel that there is restrained nervous force and vitality of an able man behind the work.

Of his ability to draw landscape it is almost unnecessary to speak; we have all seen the beautiful bird's-eye perspectives that he has made for different group plans, and we are able to appreciate that the physical aspect of the localities which he has drawn closely approximate the indication in the drawing, but his ability to indicate urban surroundings in the same precise and interesting manner is not so well known. Some of the drawings for the city improvement scheme for the city of New York showed long vistas through the city streets, and others bird's-eye views over the roofs of the city and the rivers surrounding it. Somehow he contrived in these drawings to show New York as a very lovely place and yet without distorting the actual conditions. His eye simply revealed to us the things of interest and a beauty to which we were too accustomed to properly observe, and in those drawings he has caught for us and preserved the wonderful shimmer of color which plays over the roofs of the city at certain hours of the day. There is in every city something curiously fascinating and absolutely distinctive about the general color scheme as seen from above: Paris as viewed from the Eiffel Tower is a thing of pastel shades, pale pinks, blues, and pale yellows, with occasional spots of dull olive green; New York like Paris has tones which are all its own,—grays, violets, and dark reds,—and it is because Mr. Long has seen and appreciated these colors that his city drawings are so delightful.

It is impossible to speak of his methods with much cer-

tainty; they vary with every drawing that he makes; he uses water color or pencil and water color, or pen and ink, or pen and ink and water color, or Chinese white with equal freedom and apparent equal indifference. For many of his drawings he uses a colored paper with the light spots brightened with Chinese white; he not infrequently uses Japan vellum, going over the drawings with a brownish ink, and using water color as if it were stain rather than paint. Most of his large drawings are probably done on white drawing paper, although when this is the case he commonly begins the drawing by running a faint wash over the entire surface, suiting his technique to the paper and the subject.

He can, if necessary, make a very brilliant drawing, but he cannot make a drawing of big contrasts—he does not see things that way. His windows have no heavy blacks, and his shadows never obscure the detail upon which they lie, and perhaps for this reason the one drawing which he cannot successfully make is a rendered elevation in true academic style, and in this one field alone he does not compare with the dozen other draftsmen one could name, although in rendering of block plans or group plans his excellence is unquestioned. His facility in making drawings is probably due to the fact that he has not one but about a dozen formulas upon which he can draw, so that for certain sorts of buildings, office buildings and the like, his work has become to him more or less a matter of habit and, therefore, proceeds very rapidly.

On the other hand, if a drawing does not go well and he finds the colors are not hanging together as he could wish, he has one last resource, which is his invariable advice to any one else who is making a rendering, "Put a wash of yellow over it,—that will do the trick."



Water Color Drawing of Approach to San Diego Exposition, San Diego, Cal.

Bertram G. Goodhue, Architect

Birch Burdette Long, Delineator

The Small Church

by E. Donald Robb

SECOND PAPER — DECORATION AND INTERIOR FITTINGS.

IN the preceding paper the writer discussed some of the necessary adjuncts and accessories to the church proper. One more feature bearing directly on the life of the church is the parish house or Sunday-school building. This is a distinctly modern and very important feature, as it is through the various semi-religious organizations which center around the parish house that the church exerts a large proportion of its influence. For this reason, the plan and equipment of the parish house are matters deserving of the closest study.

The parish house is sometimes entirely separate from the church proper, but is frequently required to furnish the church auditorium with additional seating by opening into it. This arrangement is very seldom satisfactory, for the parish hall is generally located to one side of the main auditorium, and consequently the acoustics are bad and the interior effect of the church always suffers.

The requirements of the parish house are ordinarily about the same for all denominations. The Sunday-school hall is the principal feature of the plan. It is best to arrange this in such a way that it can be used during the opening exercises as one large room and afterwards divided into numerous small rooms with the least amount of commotion by means of accordion doors, rolling screens, or perhaps a simple curtain.

The primary class usually occupies a sunny room near the entrance, with provision for dismissing the children quietly without disturbing the other classes. This room should also open into the general room.

At the sides of the platform should be small rooms which can be used during entertainments as dressing rooms and at other times for library and Sunday-school superintendent.

A generous sized kitchen, fully equipped with dressers, sink, and gas stove is a necessity and should naturally be convenient to that room which



A Good Example of the Decoration of a Traceried Window



Tower of St. Agatha's Church, Sparkbrook, Birmingham, England
W. H. Bidlake, Architect
Showing a Good Handling of Brick and Stone

is planned to be used for church suppers. The Sunday-school hall can be used for this purpose, but often a basement room of ample size, which can be used at other times as a gymnasium, will be a wise provision.

Several smaller rooms for the various guilds and social societies of the church may also be required, including a ladies' parlor with cupboards and, of course, toilet accommodations.

In the revival of the use of color as an adjunct to architecture, the church has been well to the front. Since the days of the Gothic revival in England the church architecture of England has been quite generally decorated in color. It is true that the early attempts at color decoration were as crude and lifeless as the resuscitated Gothic architecture itself; and the new movement as echoed in this country produced decorations quite as bad as the structures they were meant to beautify.

Through the seventeenth and eighteenth centuries all classes of buildings were uniformly colorless. The vigorous colors of the Gothic churches had slowly faded into the pale grays and dead whites of the Georgian work, and the brilliant decorations of the medieval castles and civil buildings had given place to the cold and severe treatment of the Brothers Adam, and the equally colorless creations of the French contemporaries.

With the rise of the French mural painters of the last century a certain amount of color was introduced into the hitherto cold and cheerless classic buildings, but this decorative treatment was quite different from that employed by the ancients, who decorated not only the plain wall surfaces, but the carved and moulded work as well. We are only beginning to appreciate the vast opportunities for effective work in the use of color after the manner of the ancients. We have been accustomed to regard the love of brilliant color as an indication of uncultivated taste—either a taste akin to the young child or the Hopi

Indian—and we are loath to be suspected of belonging either to the one class or the other.

It comes as somewhat of a shock, therefore, to read such extracts as the following from authorities on the subject of decorative painting as practised by the Greeks in their best periods:

"Why do we deprive ourselves of all the resources of art? Why does the classic school pretend that coldness and monotony are the inseparable accompaniments of beauty, when the Greeks, whom they present to us as artists *par excellence*, always colored their buildings inside and out, not timidly, but by putting on colors of extreme brilliancy?"—*Violet-le-Duc*.

"From the traces of coloring found in the Doric temple of Æphaia, at Ægina, it has been proved that the architrave was painted red, of an uniform tint. This served as a ground for the gilded shields on which votive inscriptions were placed and executed in metallic letters. Above the architrave the frieze presented an alternation of triglyphs and metopes, the former being painted blue, while the ground of the sculptured metopes was red, which relieved the sculptured decoration, the latter being kept the natural marble color, only that the accessories of the figures were of gilded bronze. The mutules of the cornice were painted blue. The tympanum of the pediment was also blue, serving as a background to the sculptures, which were possibly tinted a pale yellow. The surrounding mouldings were decorated with leaf patterns in red and green, or red and blue, and the gutter, or crowning member, received a similar treatment of lively coloring.

"Fragments of color found on the Parthenon and Propylæa prove that the ancient Greeks in their best period were lavish in their use of color on their buildings."—*James Ward*, "History and Methods of Ancient and Modern Painting."

It is a long way from the colorless modern city to the realization of a joyful ideal such as the above. It is just possible that the jaded nerves of the "tired business man" of to-day will not stand the mild excitement caused by a continued association with bright colors; but surely his appetite for grays must be more than satisfied by the colorless surroundings in which most business men spend the largest part of their lives.

From the few remains that have come down to us from medieval days we may be sure that the churches of those days were resplendent with glorious color. We have conclusive proof in old records and accounts, that a church or cathedral was not considered finished until it had been decorated throughout in color and gold. This was merely a continuance of the universal practice followed in classical and still more ancient times.

Mouldings, whether of stone or wood, were always colored, or were intended to receive color, as well as piers, capitals, and columns. The moulded jambs and arches of doors and windows, and the ribs and bosses of vaulted ceilings, were all painted, and the fillets and bosses often gilded. It was customary to color the web of the vault for only a short distance up from the caps, and out from the bosses which occurred at the intersections of the ribs; but often the entire vault surface was covered with arabesques. Bosses were frequently gilded with strong color in the

interstices to relieve the carving. Wood roofs were also decorated with monograms, heraldic devices, and running texts.

Plain ceilings or even vaulted ones were painted blue and adorned with lead stars, wavy rayed, and gilded, as a conventional representation of the firmament.

The painting was usually done on a thin ground of plaster with which the stone was first covered. This method was common to the Egyptians, Greeks, and all ancient peoples, as well as to the builders of the Middle Ages.

The practice of painting and gilding the woodwork of screens, galleries, pulpits, organ cases, reredoses, and font covers was common during the Middle Ages. In fact, wherever woodwork was treated at all, it was

usually done in this way with color.

The palette of the medieval decorator was very limited, with the inevitable result that the decorative schemes possessed great simplicity, vigor, and directness. Red, blue, green, white, and black are the only colors commonly met with, a favorite and extremely masculine combination being red, white, and black, with an occasional touch of gold. The colors were as bright as it was possible to get them, no "antiquing" of the colors with glazes of dust and lacquer was indulged in in those days when art was creative, not imitative. The fact that the color spots were small seems to serve the purpose of softening the whole; but, if a single feature is out of key with this scheme, it is at once noticeable. Even England is not altogether free from those creations of the commercial church decorator in stained glass, furniture, and painted work, which harmonize with nothing under the sun.

The interior wall surfaces of small churches were usually of plaster, the larger ones of stone. The plaster was prepared by simply painting it with a light wash of distemper in soft colored tints of red, blue, or green. On this ground the decorative pattern in diaper, or in alternating devices, was painted, usually in one, not more than two colors. While the range of colors was limited, perhaps, deliberately, they made good use of those at hand by cleverly transposing the colors in the alternating portions of the design, producing variety in simplicity.

In modern work these designs are frequently stenciled,



Interior of Trinity Church, Asbury Park, N. J.
Clarence W. Brazer, Architect

but in the old examples they were unquestionably done by "pouncing," or pricking holes through the original drawing to locate a few principal points, then executing the design with the brush. This is clearly evident from the slight irregularities met with in the drawing of the patterns, and by the greater freedom characteristic of brush work.

The materials and mediums used in the early work were the dry colors ground in water and applied with parchment or egg size. The former size was made by boiling cuttings of parchment, or from ordinary glue, the latter from egg beaten and mixed with water. In later work much of the decorations are in oil, although the early tempera painting when varnished presented the appearance of oil work.

Mouldings were decorated in a variety of ways, with barber-pole, chevron, or plain color, and the fancy of the designer was at perfect liberty to invent new and strange forms. As it is usually dangerous to work with more than three colors, not including gold, so is it always advisable to limit the number of decorative elements for the sake of simplicity. Running texts painted in black on a white scroll with rubricated caps make a rich but costly decoration. Sometimes when carved in wood or stone they are gilded.

It may be contended that this almost universal custom of treating the interior stone-work, both moulded and flat surfaces, with a thin coating of plaster, obscuring the jointing and deliberately sacrificing all that effect of splendid strength which we admire in good masonry, for the sake of the painted decoration, may not be a display of good artistic judgment. And it may be held as a matter of good fortune that so very few churches were ever completely finished in this direction. Certainly the painted work of the interior of the Sainte Chapelle, which, though modern, we may regard as a fairly correct example of French work, does not give one as great a feeling of satisfaction as would have been the case had the decoration been confined to a few salient points. Other examples of painted decorations, some of which are, however, modern restorations, are to be found at Rheims, Albi, Abbeville, Poitiers, St.-Germain-des-Prés, Chartres, in France; Durham, St. Albans, Sherbourne, and ancient painted roofs in great abundance at Ely, Peterborough, St. Albans, Worcester, Tewkesbury, and a host of smaller churches throughout England.

It is needless to say that in carrying out a scheme for the decoration of a church the architect should have supreme command. This should be, and usually can be, arranged at the very beginning of negotiations with the clients, and should be so stated in the contract between architect and client. In this way the decorative scheme can be controlled and each feature, when it is executed, can be made to take its proper place as a part of the whole. The subjects included in the decorative scheme whether they be for painted work, stained glass, carving in wood

or stone, hardware, tiles, or embroidery, can then be arranged in an interesting sequence; and, as each memorial is to be presented, its donor selects the item and subject from the prearranged scheme, and adheres to the restrictions laid down by it.

This is of especial importance in the question of the memorial windows, for the reason that of all the decorative features in the church, the windows, being the source of light, are by far the most conspicuous; and, of all the arts and crafts that go towards the making of the church, no single one is so likely to make or mar the interior effect as the glazing of the windows. And no one of the arts of the church has sunk so low since the age of good church building as the art of stained glass. In no other art is it quite so easy to disregard the limitations imposed by the materials and transgress the rules of good design. In this, as in other crafts, the workmen have become too expert. Inasmuch as anything can now be accomplished in glass, they argue that they are at liberty to do anything their fancy prompts. There are, however, some simple rules which should guide the architect in his criticism of the windows about to be installed in his church, and these rules the stained glass man should be compelled to respect.

His design, being a decoration, should regard the form to be decorated, and if the window happens to be mullioned, the mullions should confine the decoration, each light being given over to a single figure or group; or if the decoration is small in scale, to a series of superimposed panels.

Being decoration, it should be conventional and not pictorial. Perspective, or lights and shadows, should not be allowed under any circumstances, the former being out of place in any good decoration, and the latter particularly so in a transparent medium.

Being ecclesiastical decoration, it should be a strictly religious subject, and be treated in as dignified a style as the artist is capable of producing. The medium being glass, the subject will look better if handled in a set and rather brittle manner, avoiding all soft and flowing lines, and all semblance of prettiness in the true meaning of this word.

The glass being held in place by lead comes, the leads should frankly play an important part in the design, in fact, they should be strongly featured. The supporting bars or armatures, if any, should also be recognized as a condition to be dealt with.

The color scheme is more a matter of choice, but in this, as in our painted work, it is disastrous to work with an unlimited palette. Five or six colors with their different degrees of intensity are all that are necessary or desirable. Whether the colors are heavy or light, will depend largely on the particular building in hand; but this should be given due consideration.

Sentimentality, or effeminate prettiness, to the large majority of the untrained public, especially to those whose better judgment has been recently dislocated by some be-



A Window Possessing Real Churchly Character

reavement, is the acme of beauty. This fact is thoroughly understood by many stained glass purveyors, who play on the overwrought feelings of their prospective patrons, and introduce into their designs lovely maidens with dove-like expressions, resembling that of the departed, perhaps floating in graceful curves, or accompanied by sad-eyed cherubs and fleecy clouds. That sort of art should not be allowed to disfigure the tracery of a real church. In the same class with this is the copy of the Hoffman picture, — shades, shadows, and all, — or the wholly unreligious subject, a good example of which completely counteracts the good influence of one of our best known modern churches. The subject — an apple tree with wide-spread branches — fills the upper half of a five-light window; in the lower half is a winding stream, ending in a gorgeous sunset, without doubt the identical place where the wealthy donor went swimming as a boy.

The temporary glazing of the church windows should be given its proportion of study. The common type of glazing is of course the diamond. While this is perfectly acceptable, there is no harm in making this temporary glazing somewhat more interesting, for oftentimes it serves to keep out the weather for many years, and, in fact, good temporary glazing is preferable in every way to bad stained glass. There are many simple patterns, each capable of great variation, but none very expensive. An inexpensive variation from the common diamond treatment is the oblong on end. This effects a saving in glass and in cutting, and this saving will sometimes be sufficient to supply a little ornamentation in the upper end of the light, either in the form of a shield with simple device or merely in fantastic leading.

Where funds will permit, more or less ornamental grisaille glass is possible with little additional outlay, providing the pattern is repetitive, and the stenciled or painted portions are kept few and simple. At a somewhat greater cost, it is possible to obtain a most interesting sequence of windows in a grisaille with medallions containing emblematic figures or devices symbolizing events or personages from the Old and New Testaments, arranged in progression from west to east, culminating in the crucifixion at the altar.

Much could be said on the subject of chancel furniture, — the dimensions, arrangement, and design of each piece, — but space will not permit of anything like the detail which

such a comprehensive study would demand. The two types of chancel — the liturgical and the non-liturgical — have been touched upon in a former paper. There are many indications that these two types will some day become one, the shallow chancel with portable communion table giving place to the more ancient and dignified arrangement now in use by the churches having a more formal service. There is one thing of vital importance throughout the church, and especially in the chancel —

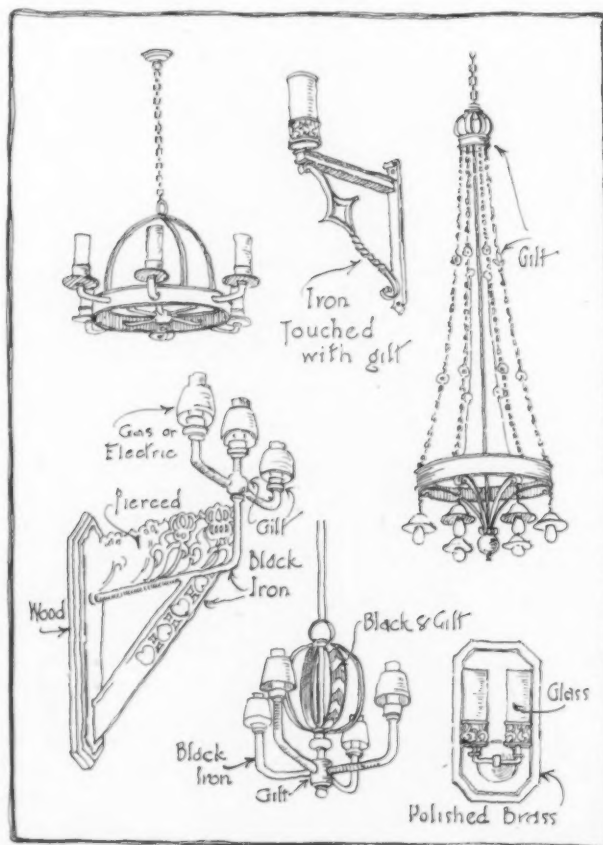
dignity. The design of each article of furniture, both here and in other parts of the church, should assist towards this end — to attain that dignified solemnity which is the making of the church.

The fascinating study of the furnishings of the altar and the vestments of the clergy would occupy a volume in itself, and cannot, therefore, be more than mentioned in a hasty survey of the subject such as this. The field of ecclesiastical needlework, by no means a small one, as well as the work of the gold and silversmiths, is included in this department of church design, and the student of these subjects will find many interesting and valuable works treating them thoroughly.*

The artificial lighting of the church is a problem with which the builders of the Middle Ages were not concerned, the result is that we have very few lighting fixtures that may

be spoken of as strictly Gothic. The modern fixture houses, however, have not been in the least hampered by this scarcity of precedent, and have prepared for us an assortment of bracket lights and chandeliers which are, without exception, bad. A number of fixtures taken from modern English churches are shown on this page, which are admirably suited to the Gothic interior, although the Gothic quatrefoil and battlement are conspicuous by their absence.

Closely allied to the lighting fixture problem is the question of hardware. Here again the commercial artist has supplied us with page after page of Gothic designs in cast brass or bronze, rich in crockets and tracery, but meaningless when considered in the light of an architectural accessory. These should by all means be scrupulously avoided, and the hardware, at least that operating the principal doors, should be hand wrought. This is by



Sketch of Church Lighting Fixtures

* "The Ornaments of the Ministers," Rev. Percy Dearmer; "The Chancel and the Altar," Harold C. King; "Glossary of Ecclesiastical Ornament," Pugin; "English Embroidery," A. F. Kendrick; "Dictionnaire du Mobilier Français," Viollet-le-Duc.

no means a financial impossibility, even in the inexpensive church. It would be ideal to have the hardware and lighting fixtures made by the same artisan — in any case they should be of similar materials and finish. The churches of the Middle Ages are rich in examples of hardware, from the very simple to the most elaborate, and these are easily adapted to our modern mechanism without loss of character. We have in this country a few craftsmen of a very high order, who are capable of executing this work in the real spirit and with much the same enthusiasm as the worker of the Middle Ages. The large manufacturers of good hardware also realize the worth of these efforts, and in many of the newer small churches the influence of these craftsmen working in the spirit of earlier days is evidenced in the constantly improving character of the hardware.

It is a most significant and important fact that the arts and crafts movement has progressed as much, if not more, in the past two decades than the movement for good church architecture itself; for in no other department of architectural design is the architect so dependent upon the individual craftsman employed to carry out the spirit of his work. This is, possibly, because the average workman's experience has been largely upon classic works, and his dealings have been mostly with machine made products, both of which demand a highly finished and mechanical result, free from all those pleasing irregularities and variations in detail or surface treatment which add so much to the charm of Gothic work and which, in fact, are absolutely indispensable to it.

The arts and crafts movement is significant in that it points to a larger and more general appreciation of the Gothic, or free spirit, in design, as opposed to the classic or more orderly ideal; and the growing public regard for this spirit will materially assist its advocates in its development.

Of the craftsmen who are working to-day in the real spirit of the old work, we have conspicuous examples in the field of furniture and joinery, in wrought iron and hardware, in stained glass, painted decoration (which, however, is still little explored in America), and ecclesiastical tile work.

In enumerating the

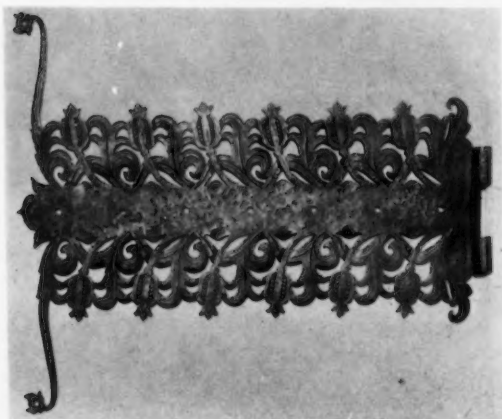
various arts associated with the Gothic movement, we have overlooked that of the ornamental plasterer, possibly because we have not as yet produced in this country any work of note comparable with that done in England; and, possibly, because this work has never been extensively employed in the church proper. Ornamental plaster is sometimes to be found in the decoration of chancel ceilings, more, however, in modern than in medieval work. In the parish house it is often used with good effect in ceiling decoration. Some good examples of this work can be seen in the parish houses and sacristies of St. Thomas's Church and the Chapel of the Intercession in New York, the Russell Sage Memorial Church at Rockaway, and in a few other works of Cram, Goodhue & Ferguson, not forgetting the attractive offices of Mr. Goodhue.

Many of the men working in these fields are artists as well as craftsmen, and, in accordance with the principles of good artist-craftsmanship, they all prefer to design the work which they execute, working sometimes from a small scale sketch of the architect's, giving a rough idea of the salient points to be observed in connection with the architectural surroundings.

It may some day be realized that the mason, the carpenter, the roofer, the plasterer, and the painter are craftsmen, as much as the workers in the more ornamental lines. This was indeed so in the Middle Ages, but is hardly possible under the present system of labor unions, which discourage anything in the nature of individual effort, commercialize the workman's time, and reduce every one to one level, robbing their work of all personal interest.

A start in the right direction has already been made, and it is incumbent upon the architect to press forward the good work, trying to inspire a real interest on the part of the workman for his craft, even though it becomes necessary for him to throw off his coat, roll up his sleeves, and wield trowel and mallet himself. The result will surely be a fuller co-operation between architect and workmen, removing much of the present spirit of discontent. The

building trades will then surely be elevated to the level of the crafts, and the art of building will be even more deserving of her title, "Mother of the Arts."



Some Examples of Carefully Wrought Iron Hardware Appropriate for Church Use

EDITORIAL COMMENT AND NOTES FOR THE MONTH



TRUTH of form in architecture was the great demand of Ruskin in all of his writings. If an ornamentation had no precedent in natural forms to allege for its use, he convicted it of ugliness. Of late we have noticed the ribbon considered as an ornament introduced to carry the written sentence or motto. Of the use of ribbons in architecture, Ruskin says: "Ribands occur frequently in arabesques—in some of a high order, too—tying up flowers, or flitting in and out among fixed forms. Is there anything like ribands in nature? It might be thought that grass and seaweed afforded apologetic types. They do not. There is a wide difference between their structure and that of a riband. They have a skeleton, an anatomy, a central rib or fiber, or framework of some kind or another, which has a beginning and an end, a root and head, and whose make and strength affect every direction of their motion, and every line of their form. The loosest weed that drifts and waves under the heaving of the sea, or hangs heavily on the brown and slippery shore, has a marked strength, structure, elasticity, graduation of substance; its extremities are more finely fibered than its center, its center than its root; every fork of its ramification is measured and proportioned; every wave of its languid lines is lovely. It has its allotted size, and place, and function; it is a specific creature. What is there like this in a riband? It has no structure; it is a succession of cut threads all alike; it has no skeleton, no make, no form, no size, no will of its own. You cut it and crush it into what you will. It has no strength, no languor. It cannot fall into a single graceful form. It cannot wave, in the true sense, but only flutter; it cannot bend, in the true sense, but only turn and be wrinkled. It is a vile thing; it spoils all that is near its wretched film of an existence. Never use it. Let the flowers come loose, if they cannot keep together without being tied; leave the sentence unwritten if you cannot write it on a tablet or book, or plain roll of paper. I know what authority there is against me. I remember the scrolls of Perugino's angels, and the ribands of Raphael's arabesques and of Ghiberti's glorious bronze flowers; no matter; they are every one of them vices and ugliness. Raphael usually felt this, and used an honest and rational tablet, as in the Madonna di Fuligno. I do not say there is any type of such tablets in nature, but all the difference lies in the fact that the tablet is not considered as an ornament, and the riband, or flying scroll, is."

IN the *National Intelligencer* of Washington, published a hundred years ago, we find the following curious extract, which is given as originally printed.

"The ingenious Mr. Daniel French bro't his discovery of a mode to make BRICKS out of the earth, in its natural state, without any other preperation than being pulverised by the machinery, to perfection. By the machine he has

constructed, 20,000 bricks may be made in a day, without the use of manual labour—They are moulded in the neatest manner in cast iron moulds, are consequently all exactly of the same size, and extremely smooth and polished—and fit so closely, that the saving in mortar and lime will be very considerable. They weigh nearly as heavy again as common bricks—and experience has shown, they burn equally as well. They are ready to be carried to the kiln as they are made, and therefore, save all the labour of making and piling, as well as the risque of wet and bad weather. This invention is one of those which will be of infinite advantage to our country—and the knowledge of it out to be diffused as widely as possible. It particularly promises to aid the improvement of the Western section of the Union. In Kentucky and Tennessee, the Ohio, and Mississippi territories, it will be peculiarly useful, and being now no longer a matter of speculation, but reduced to actual practice, all doubts of its success are done away. A model of it may be seen at Mrs. Wilsen's on the Capitol Hill, in this city."

THE damage done to Rheims Cathedral is officially given in a note issued from Bordeaux by the French Under-Secretary of State for Fine Arts, which says: "Rheims Cathedral was shelled several times. It had all the roofing burned and the stained-glass windows riddled, and to a large extent broken.

"The northern tower of the façade, which was struck by shells in the upper part over the portal, was seriously damaged by flames. The sculptural decorations and statues are irreparable.

"Inside the church, straw, which had been collected for the wounded, caught fire, generally damaging the stonework. The wall facings and masonry are charred.

"Instructions have been given to protect the vaults by building temporary roofing."

THAT the late King of the Belgians, Leopold II, was a mighty builder, and that he spent vast sums out of his own personal wealth towards beautifying Brussels, are facts not generally known. His work did not have the backing of the nation at large, but nevertheless he built palaces, museums, arches of triumph, and in fact remodeled the whole of Brussels much as if he were a second Louis XIV. Brussels was made infinitely richer as a result of Leopold II's constructive passion.

THE building operations for October show an improvement over September, but with a shrinkage of 20 per cent from the figures of October, 1913. This loss is, of course, serious, but each successive month shows improvement, and the first days of November indicate decided gains due to the gradual easing of the money market which is permitting the delayed execution of many plans.